DOCUMENT RESUME

ED 119 023 CE 006 679

TITLE Microfiche Set of Documents Announced in Abstracts of Instructional and Research Materials in Vocational and Technical Education (AIM/ARM), Volume 8, Number 6.

INSTITUTION Ohio State Univ., Columbus. Center for Vocational Education.

SPONS AGENCY Bureau of Adult, Vocational, and Technical Education (DHEW/OE), Washington, D.C.

NOTE 3,473p.

EDRS PRICE MF-$6.17 Plus Postage. HC Not Available from EDRS.

DESCRIPTORS Agricultural Education; Business Education; Career Education; Distributive Education; Documentation; *Educational Research; Health Occupations Education; Home Economics Education; Industrial Arts; *Instructional Materials; *Microfiche; Resource Materials; *Technical Education; Trade and Industrial Education; *Vocational Education

ABSTRACT

Documents announced in the Volume 8, Number 6 issue of "Abstracts of Instructional and Research Materials in Vocational and Technical Education" (AIM/ARM) and not available under individual ED numbers are included in this microfiche set. Microfiche availability for these documents is shown in the VT-ED Number Cross Reference List included in AIM/ARM, Volume 9, Number 3. The microfiche set is arranged in the following sequence: (1) a VT number list of those documents in the microfiche set for Volume 8, Number 6, and (2) the full text of documents listed, in ascending VT-number order. The documents are filmed continuously. (Author)

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AIM/ARM, VT-ERIC MICROFICHE SET

Microfiche Set of Documents Announced in

Abstracts of Instructional and Research Materials in

Vocational and Technical Education (AIM/ARM)

Volume 8, Number 6

1975

The Center for Vocational Education
The Ohio State University
1960 Kenny Road, Columbus, Ohio 43210

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INTRODUCTION

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Microfiche availability of documents in this set is shown in the VT-ED Number Cross Reference List in Volume 9, Number 3, of AIM/ARM.

Microfiche copies of individual documents in this set may be obtained by reproducing the appropriate microfiche on microfiche reproduction equipment.

Hardcopy of individual documents in this set may be available from the sources listed in the resume for each document.

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ACCESSION NUMBER: VT102203

TITLE: TV AND RADIO CAREERS.

DESCRIPTOR: *GRADE 6; *OCCUPATIONAL INFORMATION; *TELEVISION; *RADIO; *CAREER EDUCATION; PRETESTING; POST TESTING; WORKSHEETS

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 105P.; RELATED DOCUMENTS VT 102 201 THROUGH VT 102 204 IN THIS ISSUE.

ABSTRACT: PRETESTS AND POST TESTS ON CAREERS IN TELEVISION AND RADIO ARE PRESENTED AS PART OF THE SYRACUSE (NEW YORK) CITY SCHOOL DISTRICT'S GUIDED OCCUPATIONAL ORIENTATION PROGRAM. THREE BOOKLETS ARE INCLUDED FOR GRADE 6 INSTRUCTIONAL LEVELS: A BLUE BOOKLET FOR BELOW GRADE LEVEL PUPILS, YELLOW FOR AVERAGE, AND PINK FOR ABOVE GRADE LEVEL. ALL THREE LEVELS CONTAIN LEARNING ACTIVITIES TAILORED FOR THE LEARNER AT EACH LEVEL. LEARNING ACTIVITY TOPICS INCLUDE NATURE OF WORK, REQUIREMENTS, CONDITIONS OF WORK, AND ADVANTAGES (FOR THE JOB). (MF)

INSTITUTION NAME: SYRACUSE CITY SCHOOL DISTRICT, N.Y.

VT 102 203

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TV and Radio Careers

GUIDED OCCUPATIONAL INFORMATION
Syracuse U. Summer Institute
406 Hunt Graduate School
Syracuse, N. Y. 13202

VT 102 203
Book 1 of 3

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

TV and Radio Careers

Pre and Post Test

Choose the correct answer and write it in the blank

1. The person in charge of workers in the business office is the _____
   (director manager producer)

2. A person who buys time on television or radio shows is a _____
   (time salesman sponsor producer)

3. Radio-television time salesman sell time by the _____
   (hour day minute)

4. A broadcast technician takes care of _____
   (actors announcers equipment)

5. A broadcast technician needs the following education:
   _____
   (four years of college; high school; high school plus special training)

6. The most important requirement for an announcer is his _____
   (education training voice)

7 Hours for workers in TV and Radio are _____
   (regular irregular normal)

8. A person in TV and Radio who is most likely to be called on to work anytime is a _____
   (receptionist disk jockey manager)

9. The worker in TV and Radio who receives the highest starting pay per week is the)_____
   (broadcast technician; special effects technician; announcer)

10. The worker in TV and Radio who receives the lowest starting pay per week is the _____ _____
   (broadcast technician; speicial effects technician; announcer)

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

NAME _____ SCHOOL _____

PRE _____ POST _____ TEACHER _____

T.V. AND RADIO - BLUE

Assigned	Learning Activity	Done	Assigned	Enrichment	Done
Nature of Work					
1.	Reading, completing sentences, pg. 1		1.	Matching exercise, pg. 11	
2.	Copying information, checking duties, pg.2		2.	Checking T.V. program listings, pg. 12	
3.	Finding and writing word meanings, answering questions, pg. 3				
4.	Finding and writing word meanings, applying them to sentence meanings.				
5.	Reading, writing job titles, pg. 4a				
6.	Reading, writing job duties, pg. 5				
7.	Reading, finding word meanings, answering questions, pg. 6				
8.	Reading, worksheet, pg. 7				
9.	Reading, worksheet, pg. 8				
10.	Reading, worksheet, pg. 9				
11.	Completing sentences, re-writing word meanings, pg. 10				
Requirements					
1.	Reading, listing and checking facts, pg.13		1.	Practicing tongue twisters, pg. 18	
2.	Reading, worksheet, pg. 14		2.	Rating your speech pg. 19	
3.	Reading, answering questions, pg. 15				
4.	Answering questions, copying information pg. 16				
5.	Answering questions, pg. 17				

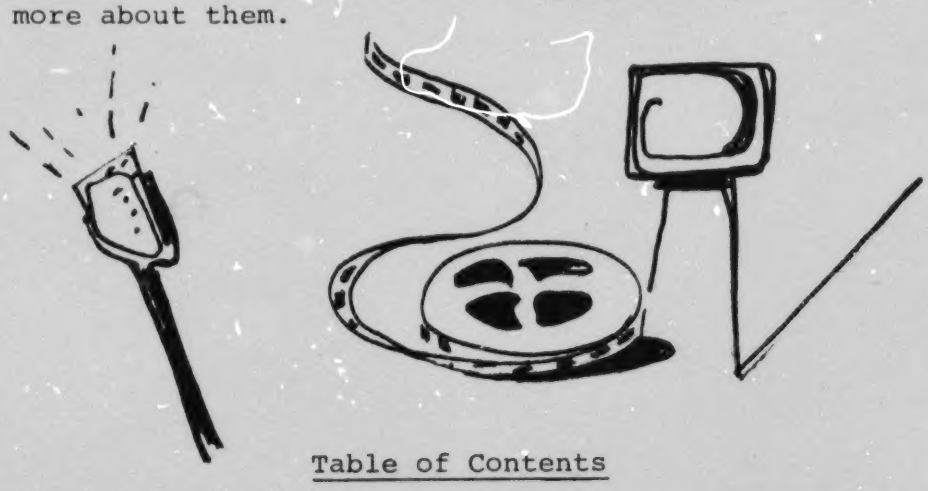
T.V. AND RADIO - Blue

Assigned	Learning Activity	Done	Assigned	Enrichment	Done
Conditions					
1.	Copying information from the Yellow pages - pg. 20 & 21.		1.	"In Your Opinion" question and answer sheet, pg. 23	
2.	Reading, worksheet, pg. 22		2.	Checklist of attitudes pg. 24	
Advantages					
1.	Obtaining information from a chart, pg.25		1.	Opinion rating of T.V. or radio program pg. 26	

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

T.V. and Radio Careers

When you turn on your radio or television set, have you ever thought of all the unseen people who are working behind the scenes? Maybe you would like to be one of those people. This study will tell you more about them.



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Learning Activity	22
Enrichment	25
Iv. Advantages (Future of Job)	
Learning Activity	27
Enrichment	28
Bibliographies	
Interview Sheet	
Glossary	

Many different jobs must be done well in order for you to hear a radio program or to watch a television program.

If you were to visit a radio or television station the first person to greet you would be the receptionist.

In the book, Come to Work With Us in a T.V. Station, find the poem about the receptionist on page 11.

The receptionist has many jobs - she answers _____ and when people visit she tries to _____ them.

1. Business Office

The business manager is in charge of the many workers in the business office.

A. Receptionist

Find the D.O.T. card numbered 82. The first sentence tells what a receptionist does. *Copy it here.* _____

_____

Here is a list of other office duties. Check the ones you thing a receptionist might do.

___ run a television camera

___ keep office lobby neat

___ sell program time

___ contact person the caller wants to see

___ type letters

___ hire new workers

(2)

B. The radio and television stations get the money they need from sponsors who buy advertising time.

Look these words up in the dictionary. Choose the meaning that fits the sentence you just read. Write them here.

sponsor - _____

_____

advertise - _____

_____

The radio-television time salesman is on page 13 of the book, Come to Work with Us in a T.V. Station.

How does the salesman sell time? *Check the right answer.*

____ by the day.

____ by the minute.

____ by the hour.

C. The Broadcast Technician sets up, operates, and takes care of the electronic equipment used to broadcast radio or television programs.

That sentence had many hard words in it. When you know the meanings of the words, the sentence will make more sense.

Find the words in the glossary. Copy the meanings that have to do with radio or television.

broadcast - _____

_____

technician - _____

_____

operate - _____

_____

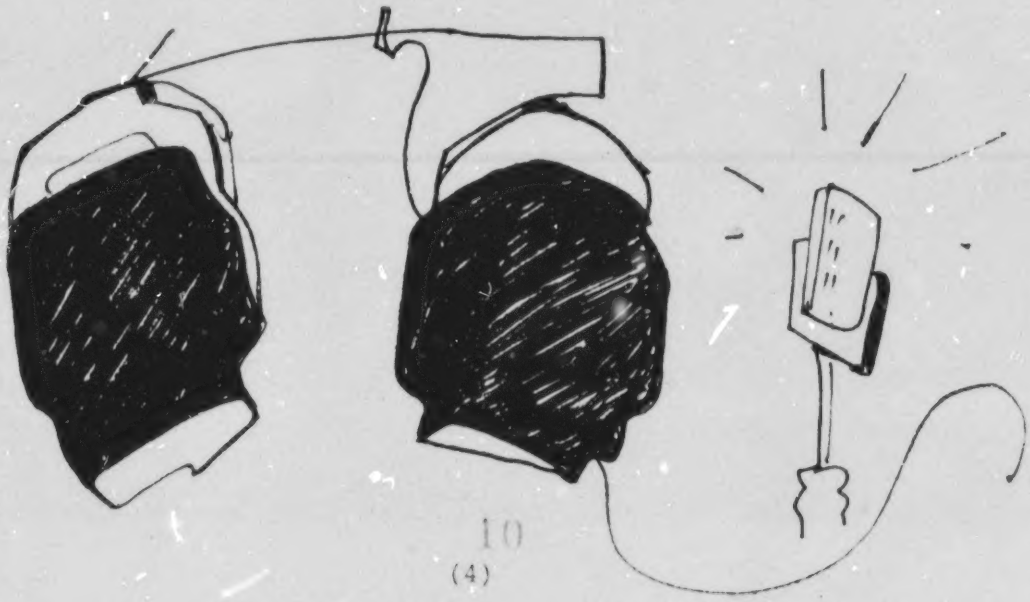
electronic - _____

_____

equipment - _____

_____

NOW READ THE SENTENCE ABOVE.



There are many different kinds of technicians. On pages 19, 21, and 23 of the book, Come to Work With us in a T.V. Station, are pictures and poems of three different kinds of technicians. After you have read the poems write the names of the workers next to the thing they work with.

(1) tape -

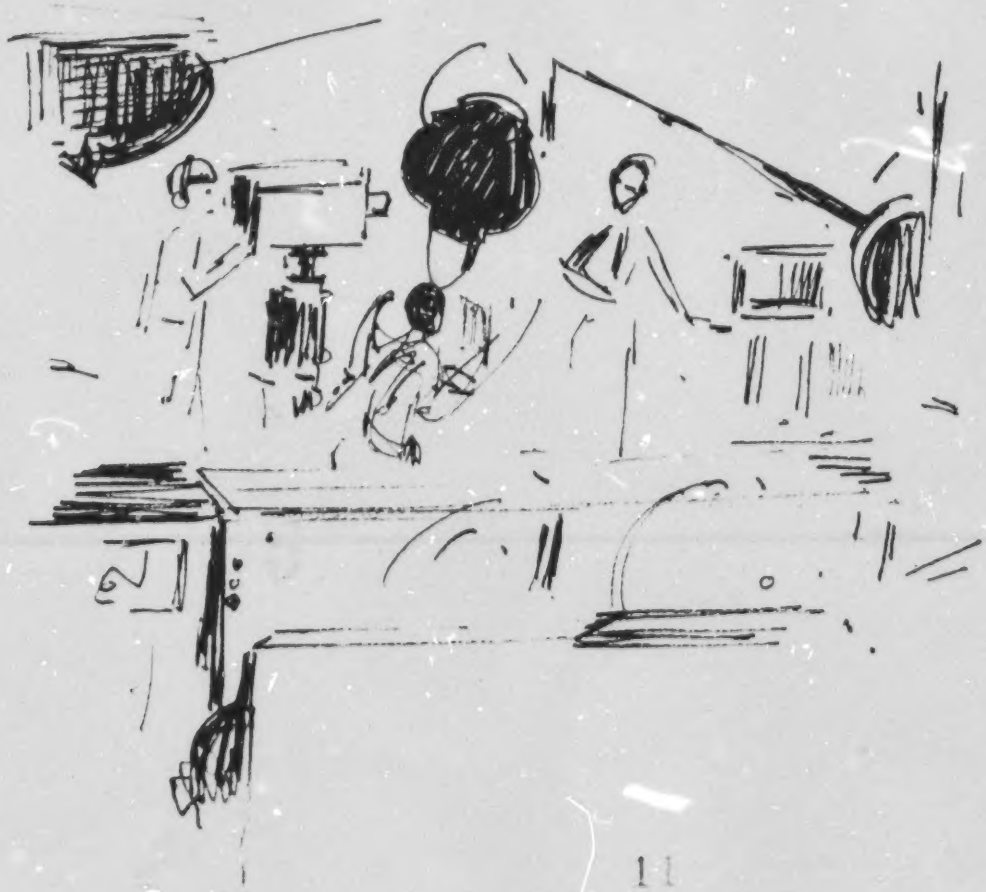
(2) sound -

(3) picture -

(a) audio engineer

(b) video-tape engineer

(c) video engineer



The voices you hear on the radio, and the faces you see on the television, are the announcers and entertainers.

D. Radio and Television Announcers

Find the D.O.T. card numbered 214. The first sentence tells five things that an announcer might do. *Read the sentence then fill in the blanks below.*

The Radio and Television Announcer

1. presents the _____ and _____.
2. introduces _____.
3. describes _____ _____.
4. interviews _____.
5. acts as _____ _____.

Some announcers are specialists. This means they only do one kind of announcing.

I. The station break announcer is on page 27 of the book, Come to Work with Us in a T.V. Station.

Read what he does, then complete the sentence.

I name the _____, read the _____, tell what is next to _____.

In the dictionary find the words and tell what they mean.

announce - _____

_____

view - _____

_____

II. Another specialist is the Newscaster. On page 35 of the book you have been reading, Come to Work with Us in a T.V. Statio , you will see what a newscaster does.

Read the poem, then write what a newscaster does.

_____

_____

III. The disc jockey is another specialist. He works on the radio.

Listen to the tape Disc Jockey and tell two jobs the disc jockey must do.

1. _____

2. _____

The Weather Girl is another specialist. On page 37 of the book, Come to Work With Us in a T.V. Station, is a poem about a weather girl.

What do you learn when you watch the weather girl?

_____

_____

E. In order to run any business smoothly there must be a boss or manager. In radio and television there are many managers.

1. The general manager or station manager is in charge of all the people in the station. Look on page 41 of the book, Come to Work with Us in a T.V. Station, to see what a Station Manager does.

   The boss says,

   "I have so much to _____."

2. The production manager could also be called the radio and television program producer-director. On the D.O.T. card numbered 362, the first sentence tells what the producer-director does.

   He _____ and _____ radio and television programs.

The second sentence tells three things he must do. *Read the sentence then fill in the blanks.*

The producer-director

1. chooses the _____.
2. _____ the _____ spent for the program.
3. takes care of _____ problems.

Find these words in the glossary. *Write the meanings in your own words.*

1. manage - _____

   _____

2. produce - _____

   _____

3. direct - _____

   _____

4. supervise - _____

   _____

Choose from the list the title of the announcer who is speaking.

A. station break announcer

B. disc jockey

C. newscaster

D. weather girl

____ "This program has been brought to you by Sudsy Wudsy Soap."

____ "Cool and Cloudy tonight with a high of 50 degrees."

____ "President Nixon met with newsmen this morning."

____ "You are listening to WABC, Channel 10 in New York."

____ "Now number 6 from the survey, Ding-a-ling Baby by the Bells."

____ "A fire on Main Street this morning destroyed an empty garage."

____ "Rainy and warm today, clearing and cooler tonight."

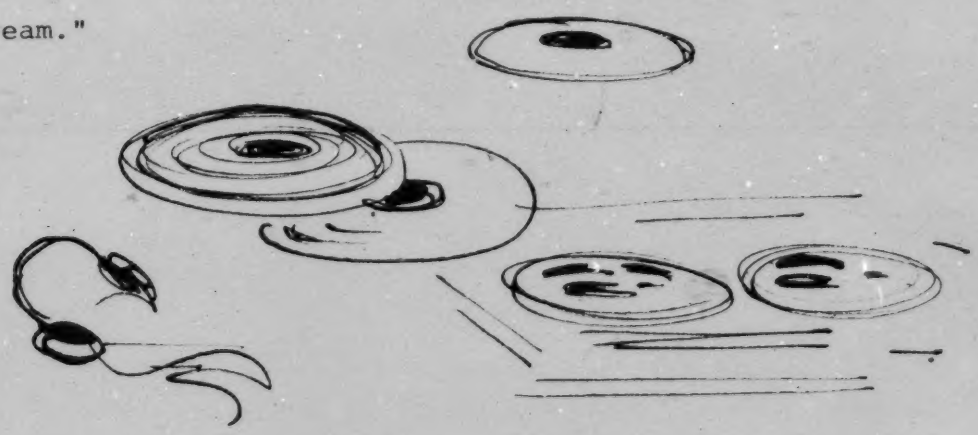
____ "Two tickets to the rock concert for the fourth caller on the hit line."

____ "Next on WDFL The Abigal Adams show."

____ "A three car accident on highway 4 has injured two people."

____ "Winds north to northeast at seven miles per hour."

____ "Now Country Joe and the Fish singing Down By the Old Mill Stream."



Listed below are 20 different kinds of television programs. Put a check mark ( ) beside the kinds of programs you like to watch. Put a double check mark ( ) beside the kinds of programs you don't like to watch.

____ 1. News and weather

____ 2. Western movies

____ 3. Horror movies

____ 4. Children's shows

____ 5. Cartoons

____ 6. Situation comedies (Lucy etc.)

____ 7. Sports

____ 8. Quiz shows

____ 9. Dramatic programs

____ 10. Musical shows

____ 11. Variety shows (Sullivan etc.)

____ 12. Comedy shows (Skeleton etc.)

____ 13. Religious programs

____ 14. Teenage dance shows

____ 15. Educational programs

____ 16. Wrestling and boxing

____ 17. Soap operas

____ 18. Detective and police drama

____ 19. Documentaries

____ 20. Panel shows (What's My Line)

A. Receptionist

The D.O.T. card numbered 82, will tell you how much education a receptionist needs.

To be a receptionist you will need a _____ _____ diploma.

Name two subjects you should take in high school.

1. _____

2. _____

Look on Page 11 in the book, Come to Work with Us in a T.V. Station. The receptionist has to be pleasant. She has to _____ and be _____.

Check the things a person who would make a good receptionist would like.

____ dogs

____ people

____ being alone

____ talking

____ working outdoors

B. Sales

Find the S.R.A. card, Finding Out About Radio-Television Time Salesmen. Look in the upper left hand corner of the cover to find out how much education a salesman needs.

Write it here.

_____

On the back of the card find the words High School Courses.

What are three of these courses?

1. _____
2. _____
3. _____

What kind of person would make a good salesman?

Check the traits you think a salesman needs.

____ likes meeting different people

____ likes to build things

____ is impolite and pushy

____ has a good imagination

____ likes to work alone

____ can talk to many different kinds of people

C. Broadcast Technicians

On the D.O.T. card numbered 215, you can find how much education a technician needs.

Write it here.

_____

Name two subjects which are required.

1. _____

2. _____

Who would make a good broadcast technician?

1. Mary, John and Bob are watching television.

Mary says, "I would like to dance like that."

John asks, "How do they decide which picture to broadcast?"

Bob wants to know, "Is there any cake left?"

Which do you think would like being a broadcast technician?

_____ Mary

_____ John

_____ Bob

When the radio stopped working Pam was sad. She would miss Tommy Towers Tap Tunes, her favorite program. Joe decided the old radio should be thrown out. A new one would look nicer anyhow. Fred said that he would try to fix it. Maybe it only needed a new part.

Who do you think would like to be a broadcast technician?

_____ Joe

_____ Fred

_____ Pam

D. Radio and Television Announcers

On the D.O.T. card numbered 214, you will see that an announcer needs a high school diploma plus some further training. Look down the right side of the card until you come to words in big black letters.

What education does the announcer need after high school?

2 years _____ or _____ college.

What is the most important thing an announcer needs?

The answer is easy - his voice of course!

In the book, Come to Work With Us in a T.V. Station, on page 35 is a poem about a newscaster, a special kind of announcer. The last line of the poem tells how an announcer must speak.

Copy that line here.

_____

What would happen if the announcer did not speak up loud and clear?

_____

_____

E. To be a Radio and Television Program Producer-Director a person must have a high school diploma.

The chances of getting a job are better if you have more education. Look on the D.O.T. card numbered 362. Toward the end of the column at the right is some further education that would help.

A producer-director could have a 4 year college, Bachelor of Science or Bachelor of Arts degree in _____, _____ or _____ _____.

Try reading these sentences as clearly as you can. Practice in front of a mirror or with a friend. When you can read them well perhaps you could tape your voice, then listen to how you sound.

HOW'S YOUR SPEECH?

Say each of the sentences below five times. Try to say them clearly and distinctly.

1. Give the goose a golden egg.
2. Sing a song while you are walking along.
3. The happy horse held his head high.
4. Please leave the cheese in the deep freeze.
5. Ned bet Ted that he would get a wet head.
6. Sid hid his bib in the big crib.
7. Jake didn't dare to repair the chair on the stair.
8. Jack sat with the bat and the cat.
9. He heard her first and third words.
10. Laura sat alone upon the comfortable sofa.

When You Talk

How would you rate your speech? Below is a list of questions about speech. Rate yourself and you will know what you need to work on.

QUESTIONS	RATING		
	OFTEN	SOME-TIMES	NEVER
1. Do you speak clearly and distinctly?			
2. Do people have to ask you to repeat what you have said?			
3. Do you speak too quickly?			
4. Do you speak too slowly?			
5. Do you like to talk a lot?			
6. Do you like to keep quiet and let others talk?			
7. Do you use a good choice of words in your conversation?			
8. Do you speak in a low, pleasant voice?			
9. Do you wish your speech could be better than it is?			
10. Do you find it hard to put what you think into words?			
11. Do you talk too loudly?			
12. Do you speak with excitement and interest?			

There are radio and television stations in all large cities and in most smaller cities. Look in the telephone book for the names of the radio and television stations in Syracuse. To find the names of the stations, look in the YELLOW PAGES.

First, find the word radio at the top of the page. Then, look for the heading Radio Stations and Broadcasting Companies.

Pick four radio stations.

Write the names and addresses here.

1. _____

_____

2. _____

_____

3. _____

_____

4. _____

_____

Now find the word television at the top of the page. Then find the heading, Television Stations and Broadcasting Companies.

Choose 4 television stations.

Write the names and addresses here.

1. _____

_____

2. _____

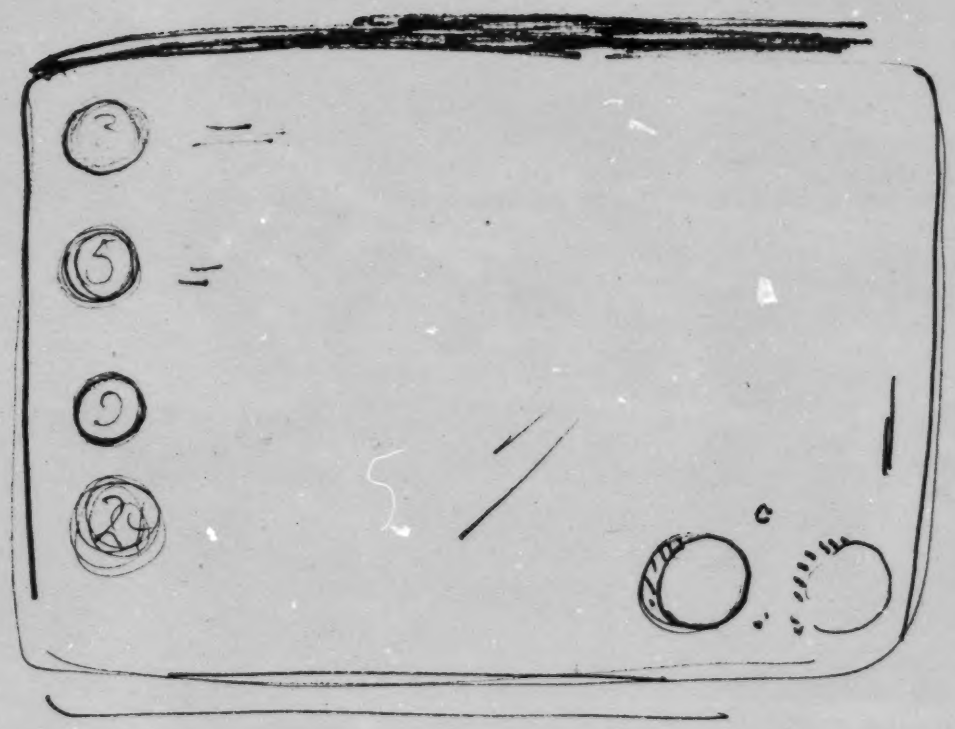
_____

3. _____

_____

4. _____

_____



Hours

Many workers in the radio and television industry must work at night and on weekends.

To find the answers to these questions, look on the back of the S.R.A. briefs under the heading Number Of Hours.

1. The Receptionist works ____ to ____ hours a week.
2. The Radio-Television Time Salesman usually works a ____ day, _____ hour week.

   When might he work on the weekend or in the evening?

   _____

3. The S.R.A. brief, Radio and Television Announcers, says that an announcer's hours might be irregular.

   Look the word irregular up in the dictionary.

   Write the meaning in your own words.

   _____

   _____

4. The radio disc jockey may work anytime. In the S.R.A. brief, Finding Out About Disc Jockeys, under the heading Working Hours, you will learn when a disc jockey might work.

   When might he work?

   1. early in _____
   2. late at _____
   3. on _____

   How many hours does he work each week? _____

In Your Opinion:

Do you think there are too many commercials on television?

_____

_____

_____

Are there any particular products which you feel should not be advertised on television? _____

If your answer is yes, tell what those products are, and give reasons why.

_____

_____

_____

_____

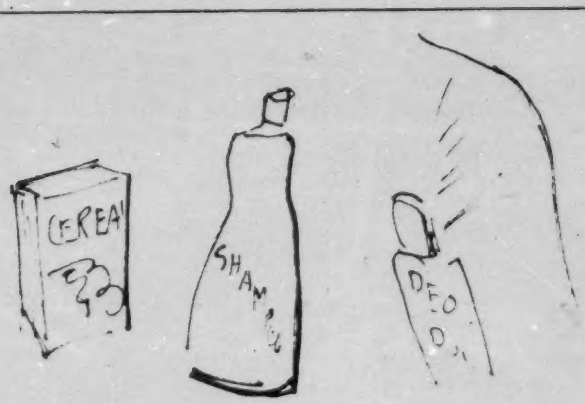
During commercials on television, many people go to the refrigerator to get something to eat. What do you usually do during television commercials?

_____

_____

_____

_____

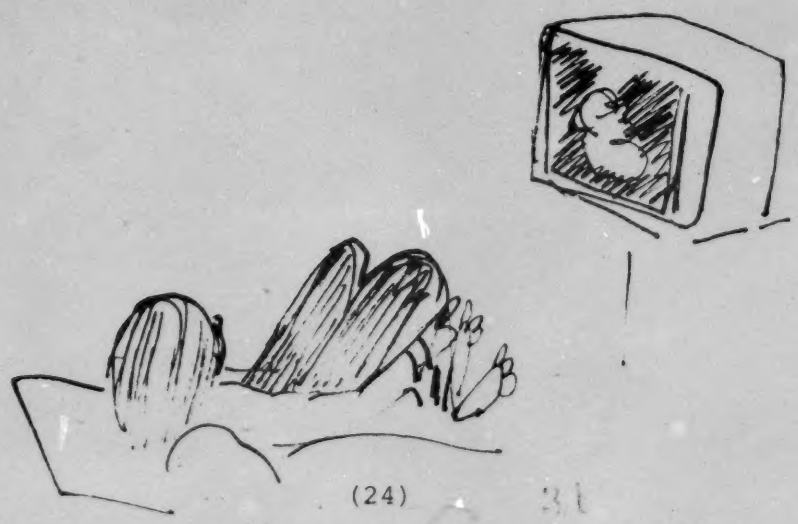


When You Watch Television

When you watch television or listen to the radio, how does it generally make you feel? Below are some words. Check the ones that tell how you feel most of the time when you watch television or listen to the radio. *(If you have trouble reading these words, ask your teacher if you may work with a partner.)*

_____ good
_____ wonderful
_____ anxious
_____ sleepy
_____ peaceful
_____ entertained
_____ relaxed
_____ satisfied
_____ fearful
_____ joyful
_____ informed
_____ excited
_____ angry

____ thrilled
____ rested
____ sad
____ amused
____ contented
____ calm
____ upset
____ terrified
____ interested
____ confused
____ fascinated
____ disappointed



Average Starting Pay - Per Week

Receptionist	$ 87.50
Radio-Television Time Salesman	37.50
Broadcast Technician	65.00
Special Effects Technician	160.00
Radio-Television Announcer	80.00
Disc Jockey	90.00

Use the chart to answer these questions.

1. Which worker has the highest starting pay?

   _____

2. Which worker has the lowest starting pay?

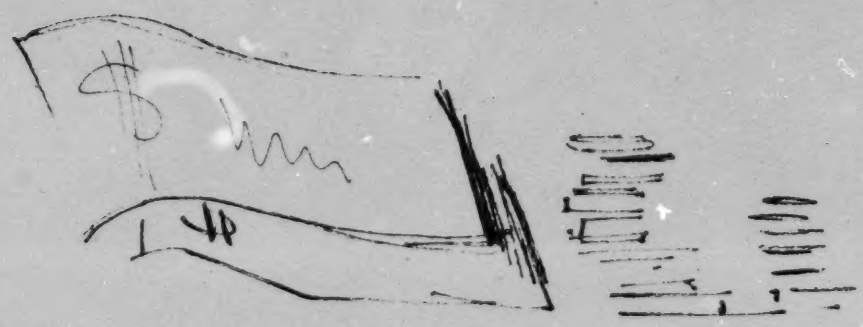
   _____

3. How much more does a disc jockey earn than a radio-television announcer?

   _____

4. If you were a broadcast technician and your friend were a receptionist, what would the total of both salaries be?

   _____



How Critical Are You?

Listed below are some of the standards the people have when they watch television or listen to the radio.

Check the ones that you feel most strongly about.

The programs must:

_____ (a) have an interesting story

_____ (b) have few commercials

_____ (c) instruct or inform you

_____ (d) have excellent acting

_____ (e) be exciting

_____ (f) be funny

_____ (g) appeal only to adults

_____ (h) last at least an hour

_____ (i) be unusual

_____ (j) appeal only to teenagers

_____ (k) relax you

_____ (l) not make you think

_____ (m) be dramatic

_____ (n) appeal only to children

_____ (o) be live, not taped

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

T.V. AND RADIO

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Disc Jockeys

Radio and Television Announcers

Radio-Television Time Salesmen

Receptionist

Special Effects Technician

Career Summary (S-115)

Radio and Television Technician

D.O.T. Cards

82 Receptionist

214 Radio and Television Announcer

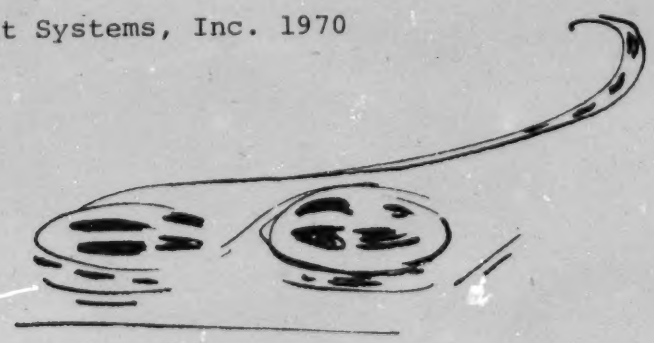
215 Radio or Television Broadcast Technician

362 Radio and Television Program Producer-Director

Book

Wilkinson, Jean and Ned, Come to Work With Us in a T.V. Station

Sextant Systems, Inc. 1970



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Glossary — T.V. and Radio

advertise - to make known to other people.

advertising agency - a business that tries to sell certain products for people by advertising them.

announcer - one who tells something out loud.

audio - what you hear.

automation - work done by machines rather than by people.

broadcast - to send a program out by radio or television.

commercials - messages on television or radio that sell products.

competition - a contest between two people for the same thing.

direct - to show the way.

director - is someone who shows others the way to do things such as how to act.

effects - results of action. "Special Effects" are created for radio and television programs to help achieve a special feeling.

electronic - a special kind of electrical energy.

engineer - a person who plans or builds or takes care of things.

equipment - tools and machinery needed to make things run.

initiative - the ability to do things on your own; to see what should be done and to go ahead and do it.

irregular - not in a regular way, something that happens in a hap-hazard way.

manage - to be in charge; a manager is a person in charge.

newscaster - someone who reads the news out loud.

operate - to run something; to make something go.

producer - a person who supplies the money or is in general charge of radio or television shows.

receptionist - a person who greets and helps people who enter an office.

specialist - a person who is skilled in one particular area.

Glossary (cont.)

sponsor - an advertiser who pays a television or radio station to announce his product.

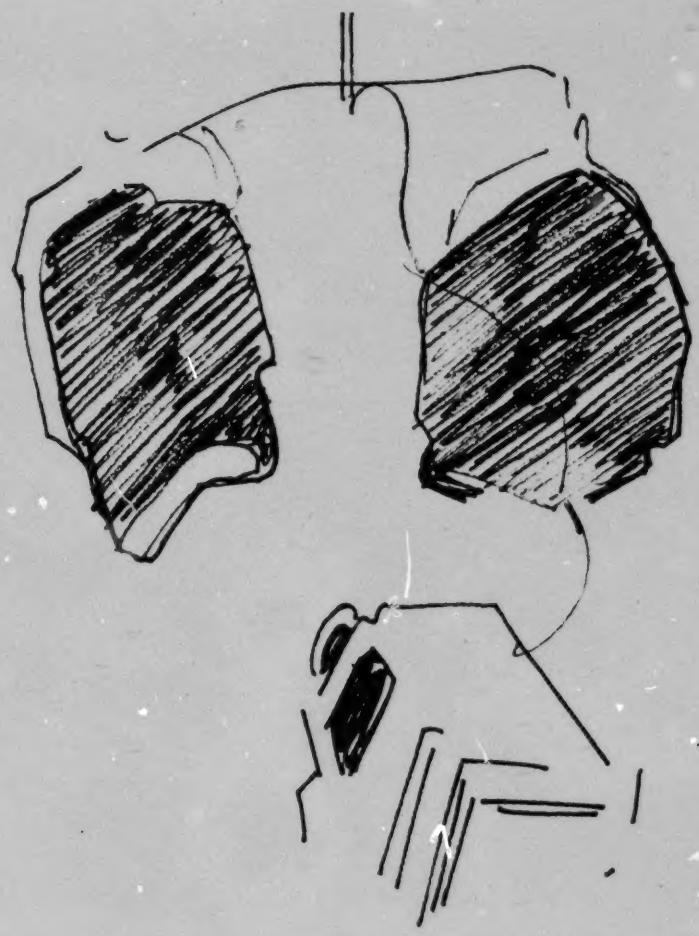
studio (station) - place where television and radio shows come from.

supervise - to see that things run right; to be in charge of something.

technician - a person who is trained to work with tools or in some special area.

video - what you see.

view - to see.



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STANDARD INTERVIEW SHEET

1. What is your name? _____

2. What is your job title? _____

3. How much education did you have to have for your job? _____

_____

4. Did you have to take a test for your job? _____

5. What are some of your duties? _____

_____

6. Do you mind telling what the starting salary for your job is?

_____

7. What is the top salary your job pays? _____

8. Is the salary the same for everyone on this type of job? _____

9. Who or what decides when you get a raise? _____

_____

10. Why did you choose this job? _____

_____

11. What do you like best about your job? _____

_____

12. What do you like least about your job? _____

_____

13. What are your working hours? _____

14. What good habits should I develop now in elementary school that would help me to become a successful worker when I grow up? _____

_____

_____

15. Are there school subjects that I must do especially well in if I were to work in this kind of job? _____

_____

_____

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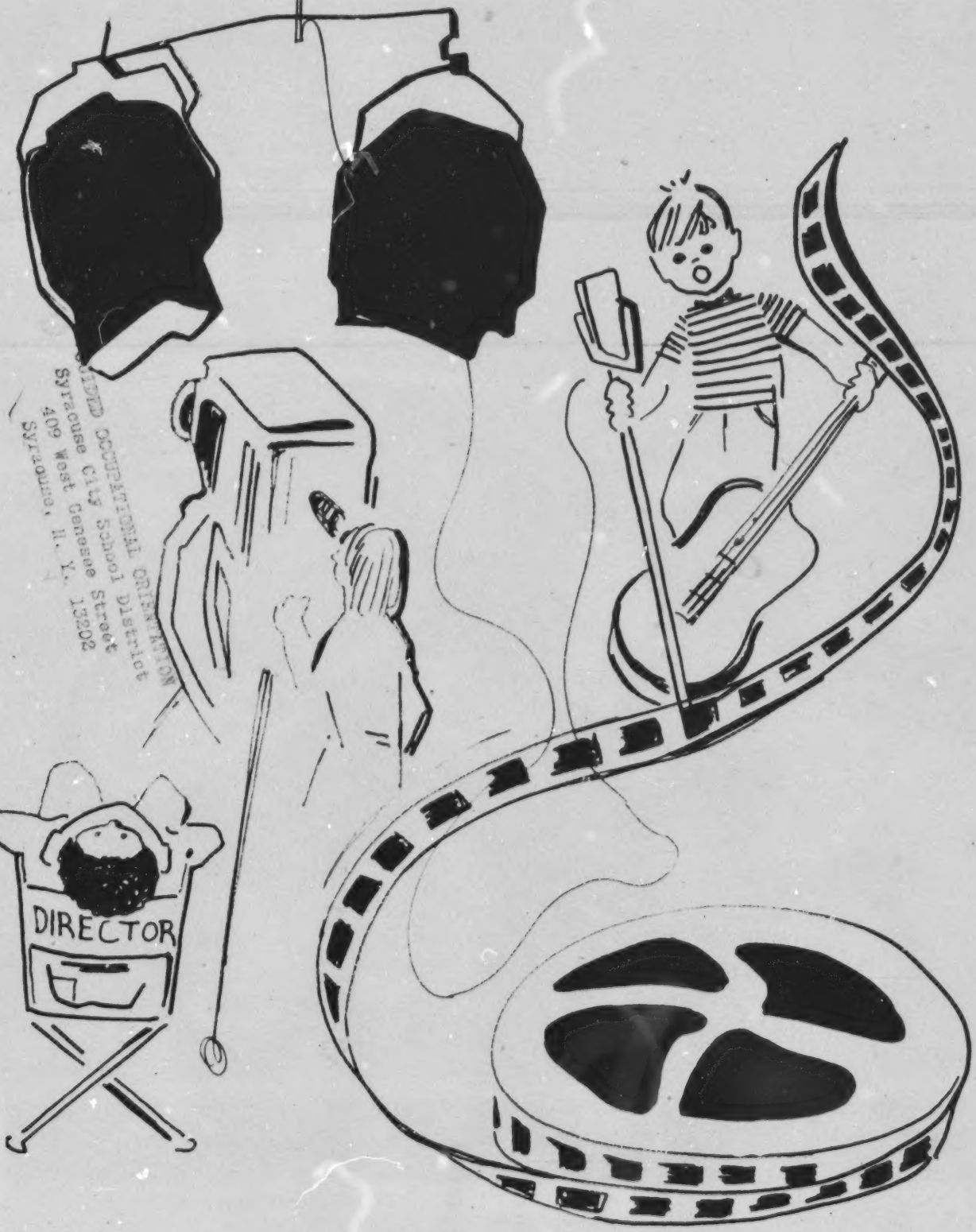
TV and Radio Careers



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Syracuse City School District
409 West Genesee Street
Syracuse, N. Y. 13202

VT 102 203
Book 2 of 3

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Syracuse City School District

TV and Radio Careers

Pre and Post Test

Choose the correct answer and write it in the blank

1. The person in charge of workers in the business office is the _____
   (director manager producer)

2. A person who buys time on television or radio shows is a _____
   (time salesman sponsor producer)

3. Radio-television time salesman sell time by the _____
   (hour day minute)

4. A broadcast technician takes care of _____
   (actors announcers equipment)

5. A broadcast technician needs the following education:
   _____
   (four years of college; high school; high school plus special training)

6. The most important requirement for an announcer is his _____
   (education training voice)

7 Hours for workers in TV and Radio are _____
   (regular irregular normal)

8. A person in TV and Radio who is most likely to be called on to work anytime is a _____
   (receptionist disk jockey manager)

9. The worker in TV and Radio who receives the highest starting pay per week is the _____
   (broadcast technician; special effects technician; announcer)

10. The worker in TV and Radio who receives the lowest starting pay per week is the _____
   (broadcast technician; speicial effects technician; announcer)

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NAME _____ SCHOOL _____

PRE _____ POST _____ TEACHER _____

T.V. AND RADIO - YELLOW

Assigned	Learning Activity	Done	Assigned	Enrichment	Done
Nature of Work					
1.	Description of Radio-T.V. workers, pg. 1		1.	Matching exercise, pg. 11	
2.	Copying information, checking duties, pg. 2		2.	Checking T.V. program listings, pg. 12	
3.	Listening to tape, worksheet, pg. 3				
4.	Reading, worksheet, pg. 4				
5.	Reading, writing job duties, pg. 5				
6.	Reading, finding word meanings, answering questions pg. 6				
7.	Reading, answering questions, pg. 6a				
8.	Reading, worksheet, pg. 7				
9.	Reading, worksheet, pg. 8				
10.	Reading, worksheet, pg. 9				
11.	Completing sentences, re-writing word meanings, pg. 10				
Requirements					
1.	Reading, listing and checking facts, pg.13		1.	Practicing tongue twisters, pg. 18	
2.	Reading, worksheet, pg. 13a		2.	Rating your speech, pg. 19	
3.	Reading, worksheet, pg. 14				
4.	Reading, answering questions, pg. 15				
5.	Answering questions, copying information, pg. 16 and 16a				
6.	Answering questions, pg. 17				

T.V. AND RADIO - Yellow

Assigned	Learning Activity	Done	Assigned	Enrichment	Done
Conditions					
1.	Copying information from the Yellow Pages, pg. 20 & 21.		1.	"In Your Opinion" question and answer sheet, pg. 23	
2.	Reading, worksheet, pg. 22		2.	Checklist of attitudes pg. 24	
3.	Worksheet, pg. 22a and 22b				
Advantages					
1.	Obtaining information from a chart, pg.25		1.	Opinion rating of T.V. programs, pg. 26	
2.	Worksheet, pg. 25a				

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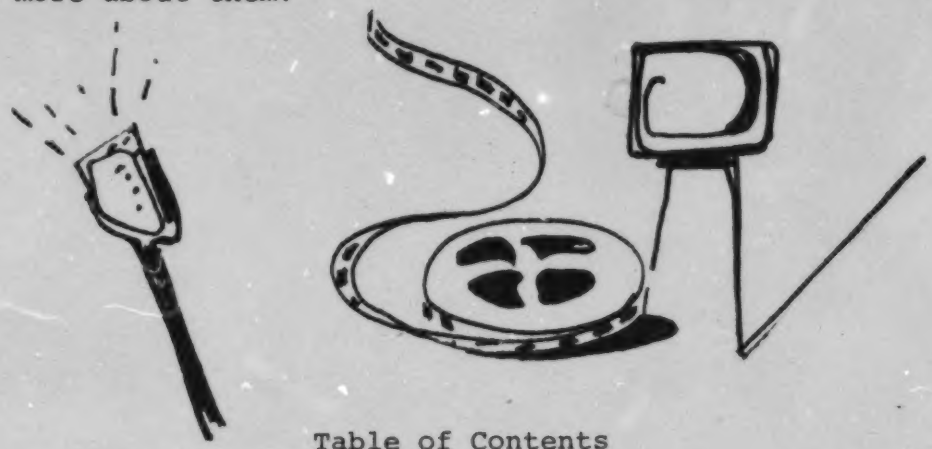
T.V. and Radio Careers

When you turn on your radio or television set, have you ever thought of all the unseen people who are working behind the scenes? Maybe you would like to be one of those people. This study will tell you more about them.



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Topic:		Page:
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	Learning Activity	1
	Enrichment	11
II.	Requirements	
	Learning Activity	14
	Enrichment	20
III.	Conditions of Work	
	Learning Activity	22
	Enrichment	25
Iv.	Advantages (Future of Job)	
	Learning Activity	27
	Enrichment	28
	Bibliographies	
	Interview Sheet	
	Glossary	

I. NATURE OF WORK
Learning Activity

Many people doing many different jobs work together in the radio and television industry. These workers may be divided in the following groups.

1. the workers who take care of business matters for the station.

2. the workers who sell program time to advertisers.

3. the workers who handle the equipment to put the program on the air.

4. the workers whose voices you hear and whose faces you see.

5. the workers who produce (or put together) the radio or television program.

1. Business Office

The business manager is in charge of the many workers in the business office.

A. Receptionist

Find the D.O.T. card numbered 82. The first sentence tells what a receptionist does. *Copy it here.* _____

_____

Here is a list of other office duties. Check the ones you thing a receptionist might do.

___ run a television camera

___ keep office lobby neat

___ sell program time

___ contact person the caller wants to see

___ type letters

___ hire new workers

(2)

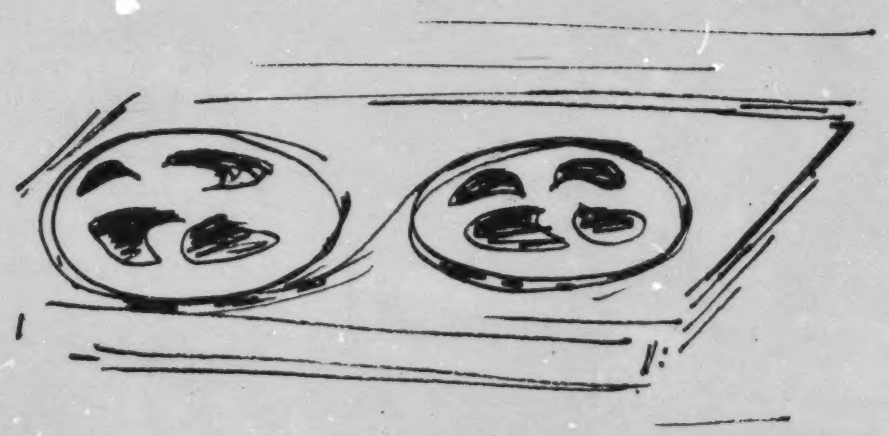
2. Sales

Radio and Television Time Salesmen

Listen to the tape, Radio and Television Time Salesman. As you listen find out just what a radio and television time salesman does.

When you have listened to the tape fill in the blanks.

A radio and television time salesmen sells radio and television _____ to _____ advertising agencies and other buyers. Without time salesmen, a _____ would have a hard time getting enough _____ to keep _____.



3. Engineering Department

A. Broadcast Technician

Read the D.O.T. card numbered 215, then fill in the blanks.

The Broadcast Technician ____ ____, _____and _____ _____ the electronic equipment used to _____ or radio or television _____.

Name five pieces of equipment a technician works with.

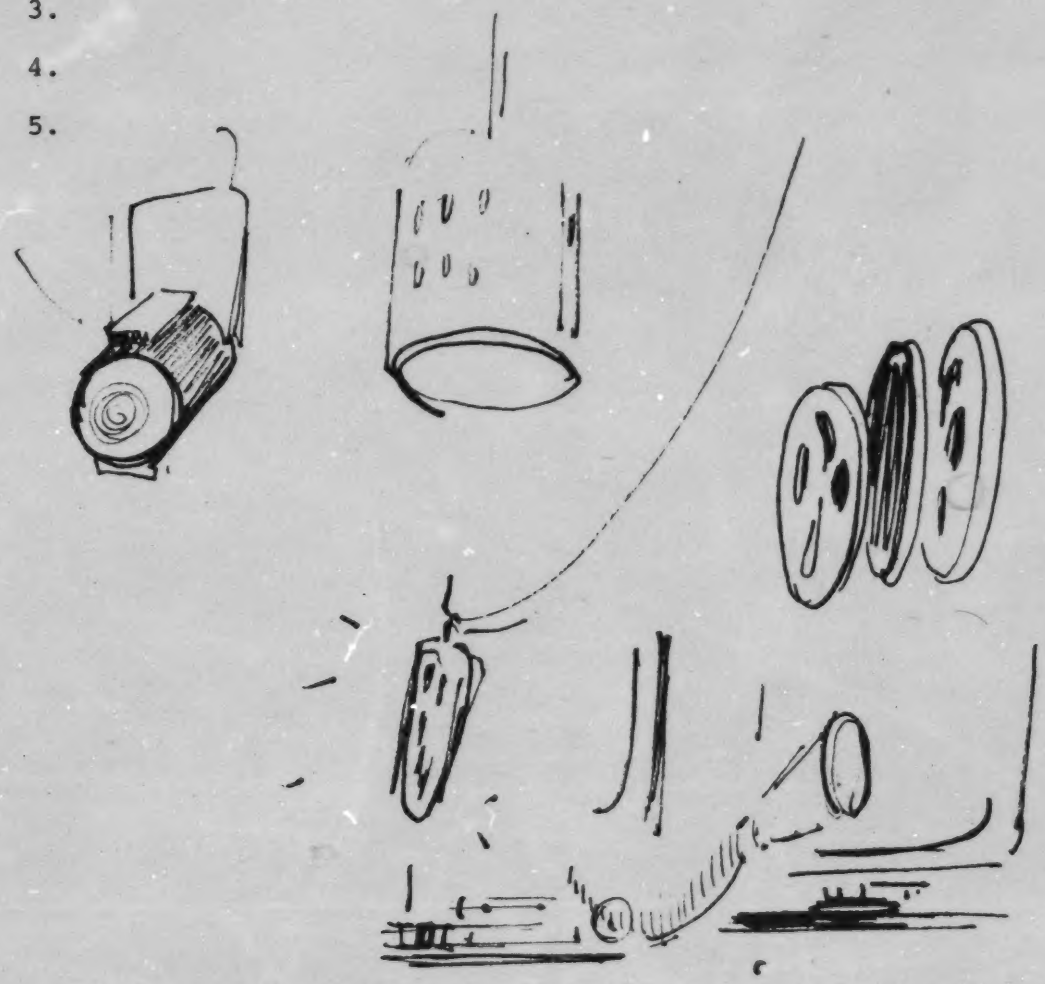
1.

2.

3.

4.

5.



The voices you hear on the radio, and the faces you see on the television, are the announcers and entertainers.

D. Radio and Television Announcers

Find the D.O.T. card numbered 214. The first sentence tells five things that an announcer might do. *Read the sentence then fill in the blanks below.*

The Radio and Television Announcer

1. presents the _____ and _____.
2. introduces _____.
3. describes _____ _____.
4. interviews _____.
5. acts as _____ _____.

Some announcers are specialists. This means they only do one kind of announcing.

I. The station break announcer is on page 27 of the book, Come to Work with Us in a T.V. Station.

Read what he does, then complete the sentence.

I name the _____, read the _____, tell what is next to _____.

In the dictionary find the words and tell what they mean.

announce - _____

_____

view - _____

_____

II. Another specialist is the Newscaster. On page 35 of the book you have been reading, Come to Work with Us in a T.V. Statio , you will see what a newscaster does.

Read the poem, then write what a newscaster does.

_____

_____

Find the S.R.A. Brief, Finding Out About Radio and Television Announcers.

Read the last section headed *Jason Makes a News Broadcast*. What did Jason do to get ready for his news broadcast?

_____

_____

_____

III. The disc jockey is another specialist. He works on the radio.

Listen to the tape Disc Jockey and tell two jobs the disc jockey must do.

1. _____

2. _____

The Weather Girl is another specialist. On page 37 of the book, Come to Work With Us in a T.V. Station, is a poem about a weather girl.

What do you learn when you watch the weather girl?

_____

_____

E. In order to run any business smoothly there must be a boss or manager. In radio and television there are many managers.

1. The general manager or station manager is in charge of all the people in the station. Look on page 41 of the book, Come to Work with Us in a T.V. Station, to see what a Station Manager does.

   The boss says,

   "I have so much to _____."

2. The production manager could also be called the radio and television program producer-director. On the D.O.T. card numbered 362, the first sentence tells what the producer-director does.

   He _____ and _____radio and television programs.

The second sentence tells three things he must do. *Read the sentence then fill in the blanks.*

The producer-director

1. chooses the _____.
2. _____ the _____ spent for the program.
3. takes care of _____ problems.

Find these words in the glossary. *Write the meanings in your own words.*

1. manage - _____

_____

2. produce - _____

_____

3. direct - _____

_____

4. supervise - _____

_____

Choose from the list the title of the announcer who is speaking.

A. station break announcer

B. disc jockey

C. newscaster

D. weather girl

____ "This program has been brought to you by Sudsy Wudsy Soap."

____ "Cool and Cloudy tonight with a high of 50 degrees."

____ "President Nixon met with newsmen this morning."

____ "You are listening to WABC, Channel 10 in New York."

____ "Now number 6 from the survey, Ding-a-ling Baby by the Bells."

____ "A fire on Main Street this morning destroyed an empty garage."

____ "Rainy and warm today, clearing and cooler tonight."

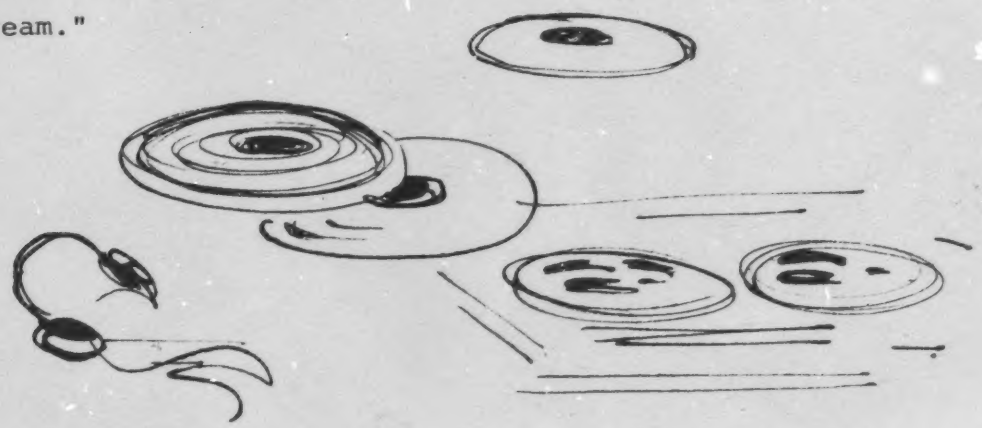
____ "Two tickets to the rock concert for the fourth caller on the hit line."

____ "Next on WDFL The Abigal Adams show."

____ "A three car accident on highway 4 has injured two people."

____ "Winds north to northeast at seven miles per hour."

____ "Now Country Joe and the Fish singing Down By the Old Mill Stream."



Listed below are 20 different kinds of television programs. Put a check mark ( ) beside the kinds of programs you like to watch. Put a double check mark ( ) beside the kinds of programs you don't like to watch.

____ 1. News and weather
____ 2. Western movies
____ 3. Horror movies
____ 4. Children's shows
____ 5. Cartoons
____ 6. Situation comedies (Lucy etc.)
____ 7. Sports
____ 8. Quiz shows
____ 9. Dramatic programs
____ 10. Musical shows
____ 11. Variety shows (Sullivan etc.)
____ 12. Comedy shows (Skeleton etc.)
____ 13. Religious programs
____ 14. Teenage dance shows
____ 15. Educational programs
____ 16. Wrestling and boxing
____ 17. Soap operas
____ 18. Detective and police drama
____ 19. Documentaries
____ 20. Panel shows (What's My Line)

A. Receptionist

The D.O.T. card numbered 82, will tell you how much education a receptionist needs.

To be a receptionist you will need a _____ _____ diploma.

Name two subjects you should take in high school.

1. _____

2. _____

Look on Page 11 in the book, Come to Work with Us in a T.V. Station. The receptionist has to be pleasant. She has to _____ and be _____.

Check the things a person who would make a good receptionist would like.

____ dogs

____ people

____ being alone

____ talking

____ working outdoors

On the back of the S.R.A. brief, Finding Out About Receptionists, find the section headed Getting Started.

What are two things that can take the place of experience when looking for a job?

1. adequate _____
2. good _____

B. Sales

Find the S.R.A. card, Finding Out About Radio-Television Time Salesmen. Look in the upper left hand corner of the cover to find out how much education a salesman needs.

Write it here.

_____

On the back of the card find the words High School Courses.

What are three of these courses?

1. _____
2. _____
3. _____

What kind of person would make a good salesman?

Check the traits you think a salesman needs.

____ likes meeting different people

____ likes to build things

____ is impolite and pushy

____ has a good imagination

____ likes to work alone

____ can talk to many different kinds of people

C. Broadcast Technicians

On the D.O.T. card numbered 215, you can find how much education a technician needs.

Write it here.

_____

Name two subjects which are required.

1. _____

2. _____

Who would make a good broadcast technician?

1. Mary, John and Bob are watching television.

Mary says, "I would like to dance like that."

John asks, "How do they decide which picture to broadcast?"

Bob wants to know, "Is there any cake left?"

Which do you think would like being a broadcast technician?

_____ Mary

_____ John

_____ Bob

When the radio stopped working Pam was sad. She would miss Tommy Towers Tap Tunes, her favorite program. Joe decided the old radio should be thrown out. A new one would look nicer anyhow. Fred said that he would try to fix it. Maybe it only needed a new part.

Who do you think would like to be a broadcast technician?

_____ Joe

_____ Fred

_____ Pam

D. Radio and Television Announcers

On the D.O.T. card numbered 214, you will see that an announcer needs a high school diploma plus some further training. Look down the right side of the card until you come to words in big black letters.

What education does the announcer need after high school?

2 years _____ or _____ college.

What is the most important thing an announcer needs?

The answer is easy - his voice of course!

In the book, Come to Work With Us in a T.V. Station, on page 35 is a poem about a newscaster, a special kind of announcer. The last line of the poem tells how an announcer must speak.

Copy that line here.

_____

What would happen if the announcer did not speak up loud and clear?

_____

_____

D. Radio and Television Announcers

Find the S.R.A. brief, Finding Out About Radio and Television Announcers. On the back read the section headed Education.

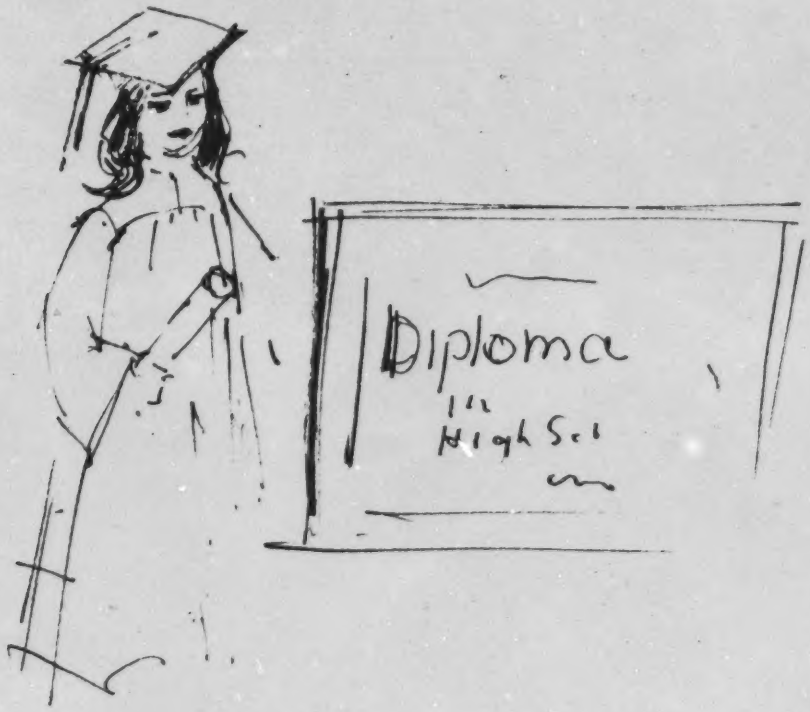
Why is a college degree recommended?

_____

_____

E. To be a Radio and Television Program Producer-Director a person must have a high school diploma.

The chances of getting a job are better if you have more education. Look on the D.O.T. card numbered 362. Toward the end of the column at the right is some further education that would help.



A producer-director could have a 4 year college, Bachelor of Science or Bachelor of Arts degree in _____, _____ or _____ _____.

Try reading these sentences as clearly as you can. Practice in front of a mirror or with a friend. When you can read them well perhaps you could tape your voice, then listen to how you sound.

HOW'S YOUR SPEECH?

Say each of the sentences below five times. Try to say them clearly and distinctly.

1. Give the goose a golden egg.
2. Sing a song while you are walking along.
3. The happy horse held his head high.
4. Please leave the cheese in the deep freeze.
5. Ned bet Ted that he would get a wet head.
6. Sid hid his bib in the big crib.
7. Jake didn't dare to repair the chair on the stair.
8. Jack sat with the bat and the cat.
9. He heard her first and third words.
10. Laura sat alone upon the comfortable sofa.

When You Talk

How would you rate your speech? Below is a list of questions about speech. Rate yourself and you will know what you need to work on.

QUESTIONS	RATING		
	OFTEN	SOME-TIMES	NEVER
1. Do you speak clearly and distinctly?			
2. Do people have to ask you to repeat what you have said?			
3. Do you speak too quickly?			
4. Do you speak too slowly?			
5. Do you like to talk a lot?			
6. Do you like to keep quiet and let others talk?			
7. Do you use a good choice of words in your conversation?			
8. Do you speak in a low, pleasant voice?			
9. Do you wish your speech could be better than it is?			
10. Do you find it hard to put what you think into words?			
11. Do you talk too loudly?			
12. Do you speak with excitement and interest?			

There are radio and television stations in all large cities and in most smaller cities. Look in the telephone book for the names of the radio and television stations in Syracuse. To find the names of the stations, look in the YELLOW PAGES.

First, find the word radio at the top of the page. Then, look for the heading Radio Stations and Broadcasting Companies.

Pick four radio stations.

Write the names and addresses here.

1. _____

_____

2. _____

_____

3. _____

_____

4. _____

_____

Now find the word television at the top of the page. Then find the heading, Television Stations and Broadcasting Companies.

Choose 4 television stations.

Write the names and addresses here.

1. _____

_____

2. _____

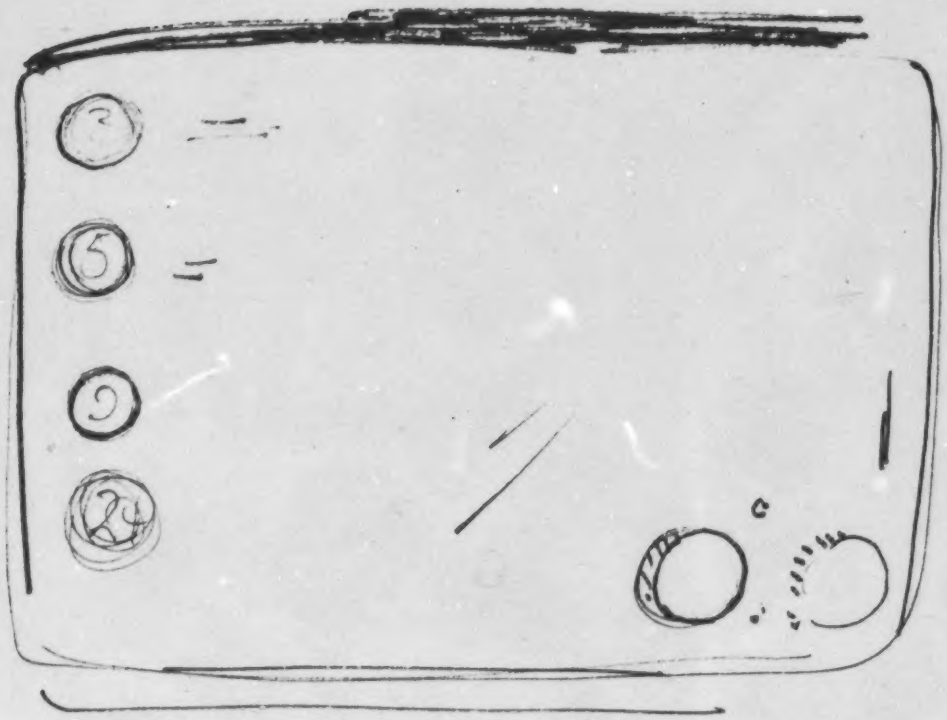
_____

3. _____

_____

4. _____

_____



Hours

Many workers in the radio and television industry must work at night and on weekends.

To find the answers to these questions, look on the back of the S.R.A. briefs under the heading Number Of Hours.

1. The Receptionist works ____ to ____ hours a week.
2. The Radio-Television Time Salesman usually works a ____ day, _____ hour week.

   When might he work on the weekend or in the evening?

   _____

3. The S.R.A. brief, Radio and Television Announcers, says that an announcer's hours might be irregular.

   Look the word irregular up in the dictionary.

   Write the meaning in your own words.

   _____

   _____

4. The radio disc jockey may work anytime. In the S.R.A. brief, Finding Out About Disc Jockeys, under the heading Working Hours, you will learn when a disc jockey might work.

   When might he work?

   1. early in _____
   2. late at _____
   3. on _____

   How many hours does he work each week? _____

Get all the S.R.A. briefs in the Radio and Television folder.

You should have:

Broadcast Technicians

Disc Jockeys

Radio and Television Announcers

Radio-Television Time Salesmen

Receptionists

Special Effects Technicians

Use the information on the back of these briefs to complete the following sentences.

1. Broadcast Technicians: There are more than _____ radio stations and _____ television stations in the United States.
2. Disc Jockeys: Disc jockeys may be employed by _____ or by local _____. Many well-known disc jockeys can earn extra money by serving as _____ of _____ at dances and _____ _____.
3. Radio and Television Announcers: More announcers are employed in _____ and _____ than in other states.
4. Radio-Television Time Salesmen: A great number of jobs are in _____ _____ such as New York and Chicago, but experience can be obtained in _____ _____ _____.

5. Receptionists: Most receptionist jobs are found _____ and _____ cities.

Name four types of offices in which receptionists may be employed:

(1) _____

(2) _____

(3) _____

(4) _____

6. Special Effects Technicians: Jobs are found wherever _____, _____ _____, or _____ programs are produced. Three cities that offer most opportunities for special effects technicians to find work are;

(1) _____

(2) _____

(3) _____

people will be listening to this type of show.

MONDAY:	1ST SHIFT (4 HOURS)	2ND SHIFT (4 HOURS)
	From _____ (A.M. -P.M.)	From _____ (A.M.-P.M.)
	To _____ (A.M. -P.M.)	To _____ (A.M._P.M.)

3. Radio and Television Announcer: More announcers are employed in _____ and _____ than in other states.

   Getting ahead as an announcer requires hard _____, _____, and a great deal of _____.

4. Radio-Television Time Salesmen: A great number of jobs are in _____ _____ such as New York and Chicago, but experience can be obtained in _____ _____ _____.

   A time salesman may enter the field as a _____ or a _____ _____ and move up to a _____ sales job. Advancement deals mainly on the _____ and _____ of the individual.

Look up the word "initiative" in the glossary.

Copy the meaning here:

_____

_____

_____

Use your initiative to unscramble the following words into a sentence.

of using The initiative initials Inez in was during initiation instilled the

In Your Opinion:

Do you think there are too many commercials on television?

_____

_____

_____

Are there any particular products which you feel should not be advertised on television? _____

If your answer is yes, tell what those products are, and give reasons why.

_____

_____

_____

_____

During commercials on television, many people go to the refrigerator to get something to eat. What do you usually do during television commercials?

_____

_____

_____

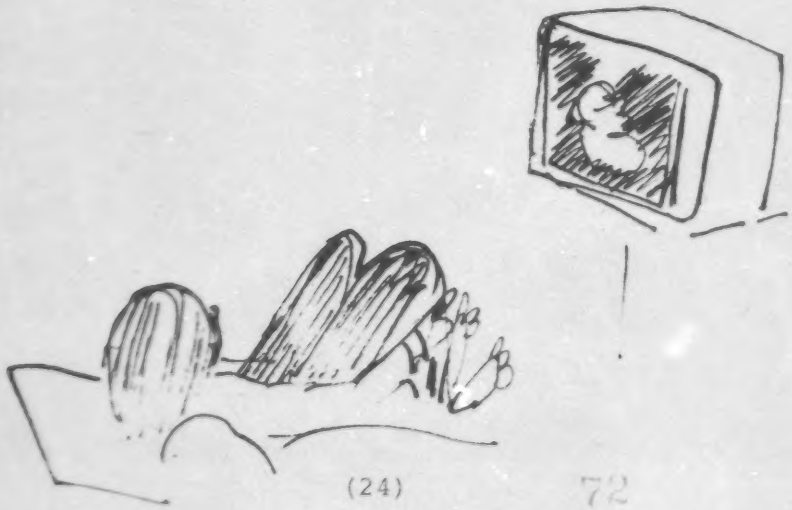
_____

When You Watch Television

When you watch television or listen to the radio, how does it generally make you feel? Below are some words. Check the ones that tell how you feel most of the time when you watch television or listen to the radio. *(If you have trouble reading these words, ask your teacher if you may work with a partner.)*

_____ good
_____ wonderful
_____ anxious
_____ sleepy
_____ peaceful
_____ entertained
_____ relaxed
_____ satisfied
_____ fearful
_____ joyful
_____ informed
_____ excited
_____ angry

____ thrilled
____ rested
____ sad
____ amused
____ contented
____ calm
____ upset
____ terrified
____ interested
____ confused
____ fascinated
____ disappointed



Average Starting Pay - Per Week

Receptionist	$ 87.50
Radio-Television Time Salesman	87.50
Broadcast Technician	65.00
Special Effects Technician	160.00
Radio-Television Announcer	80.00
Disc Jockey	90.00

Use the chart to answer these questions.

1. Which worker has the highest starting pay?

_____

2. Which worker has the lowest starting pay?

_____

3. How much more does a disc jockey earn than a radio-television announcer?

_____

4. If you were a broadcast technician and your friend were a receptionist, what would the total of both salaries be?

_____

Learning Activity

Get the S.R.A. brief, Broadcast Technicians. Read the section on the back, entitled "Future".

Put T for true or F for false in front of the following:

_____ Fewer stations are expected to go on the air in the coming years.

_____ Automation may cause a decrease in the number of technicians.

_____ The field is limited.

_____ Competition for the jobs is not great.

Get the S.R.A. brief, Radio and Television Announcers. Read the section on the back, entitled "Future".

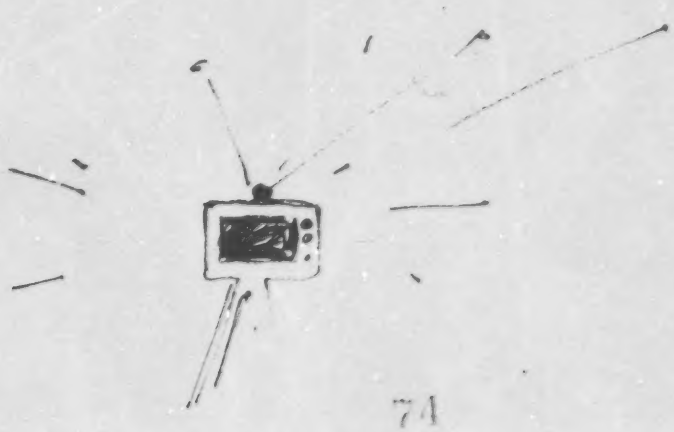
Put T for true or F for false in front of the following:

_____ Radio and Television stations are not expected to expand their operations in the years ahead.

_____ The growth of the industry and replacement needs will create about 800 to 900 openings for announcers each year.

_____ Competition is keen.

_____ There will not be jobs available.



How Critical Are You?

Listed below are some of the standards the people have when they watch television or listen to the radio.

Check the ones that you feel ***most*** ***strongly*** *about.*

The programs must:

_____ (a) have an interesting story

_____ (b) have few commercials

_____ (c) instruct or inform you

_____ (d) have excellent acting

_____ (e) be exciting

_____ (f) be funny

_____ (g) appeal only to adults

_____ (h) last at least an hour

_____ (i) be unusual

_____ (j) appeal only to teenagers

_____ (k) relax you

_____ (l) not make you think

_____ (m) be dramatic

_____ (n) appeal only to children

_____ (o) be live, not taped

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

T.V. AND RADIO

Bibliography

SRA Brief

Broadcast Technician

Disc Jockeys

Radio and Television Announcers

Radio-Television Time Salesmen

Receptionist

Special Effects Technician

Career Summary (S-115)

Radio and Television Technician

D.O.T. Cards

82 Receptionist

214 Radio and Television Announcer

215 Radio or Television Broadcast Technician

362 Radio and Television Program Producer-Director

Book

Wilkinson, Jean and Ned, Come to Work With Us in a T.V. Station

Sextant Systems, Inc. 1970

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Syracuse City School District

Glossary — T.V. and Radio

advertise - to make known to other people.

advertising agency - a business that tries to sell certain products for people by advertising them.

announcer - one who tells something out loud.

audio - what you hear.

automation - work done by machines rather than by people.

broadcast - to send a program out by radio or television.

commercials - messages on television or radio that sell products.

competition - a contest between two people for the same thing.

direct - to show the way.

director - is someone who shows others the way to do things such as how to act.

effects - results of action. "Special Effects" are created for radio and television programs to help achieve a special feeling.

electronic - a special kind of electrical energy.

engineer - a person who plans or builds or takes care of things.

equipment - tools and machinery needed to make things run.

initiative - the ability to do things on your own; to see what should be done and to go ahead and do it.

irregular - not in a regular way, something that happens in a hap-hazard way.

manage - to be in charge; a manager is a person in charge.

newscaster - someone who reads the news out loud.

operate - to run something; to make something go.

producer - a person who supplies the money or is in general charge of radio or television shows.

receptionist - a person who greets and helps people who enter an office.

specialist - a person who is skilled in one particular area.

Glossary (cont.)

sponsor - an advertiser who pays a television or radio station to announce his product.

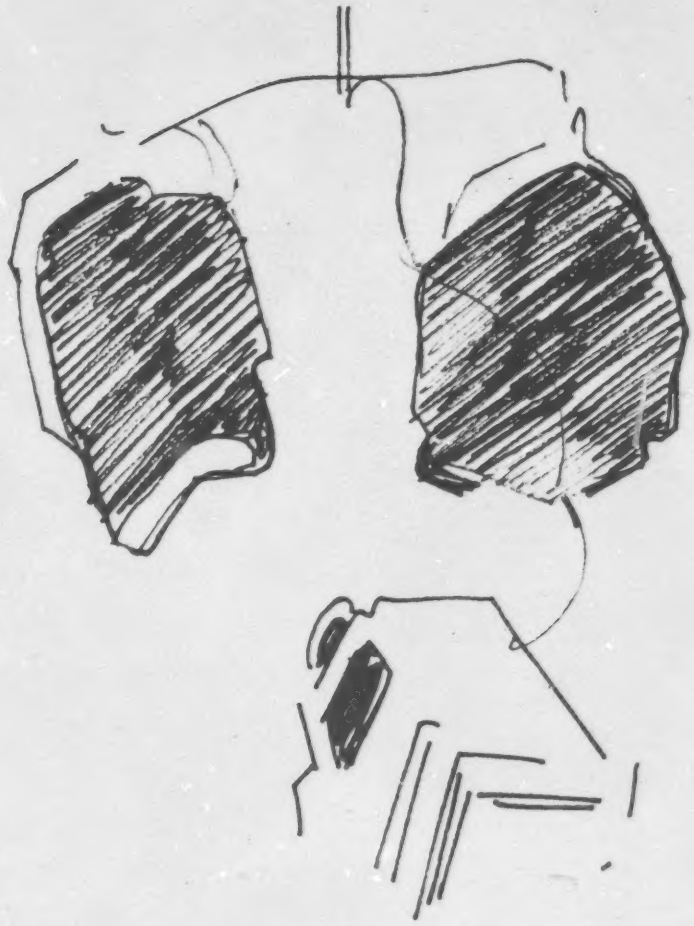
studio (station) - place where television and radio shows come from.

supervise - to see that things run right; to be in charge of something.

technician - a person who is trained to work with tools or in some special area.

video - what you see.

view - to see.



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STANDARD INTERVIEW SHEET

1. What is your name? _____

2. What is your job title? _____

3. How much education did you have to have for your job? _____

_____

4. Did you have to take a test for your job? _____

5. What are some of your duties? _____

_____

6. Do you mind telling what the starting salary for your job is?

_____

7. What is the top salary your job pays? _____

8. Is the salary the same for everyone on this type of job? _____

9. Who or what decides when you get a raise? _____

_____

10. Why did you choose this job? _____

_____

11. What do you like best about your job? _____

_____

12. What do you like least about your job? _____

_____

13. What are your working hours? _____

14. What good habits should I develop now in elementary school that would help me to become a successful worker when I grow up? _____

_____

_____

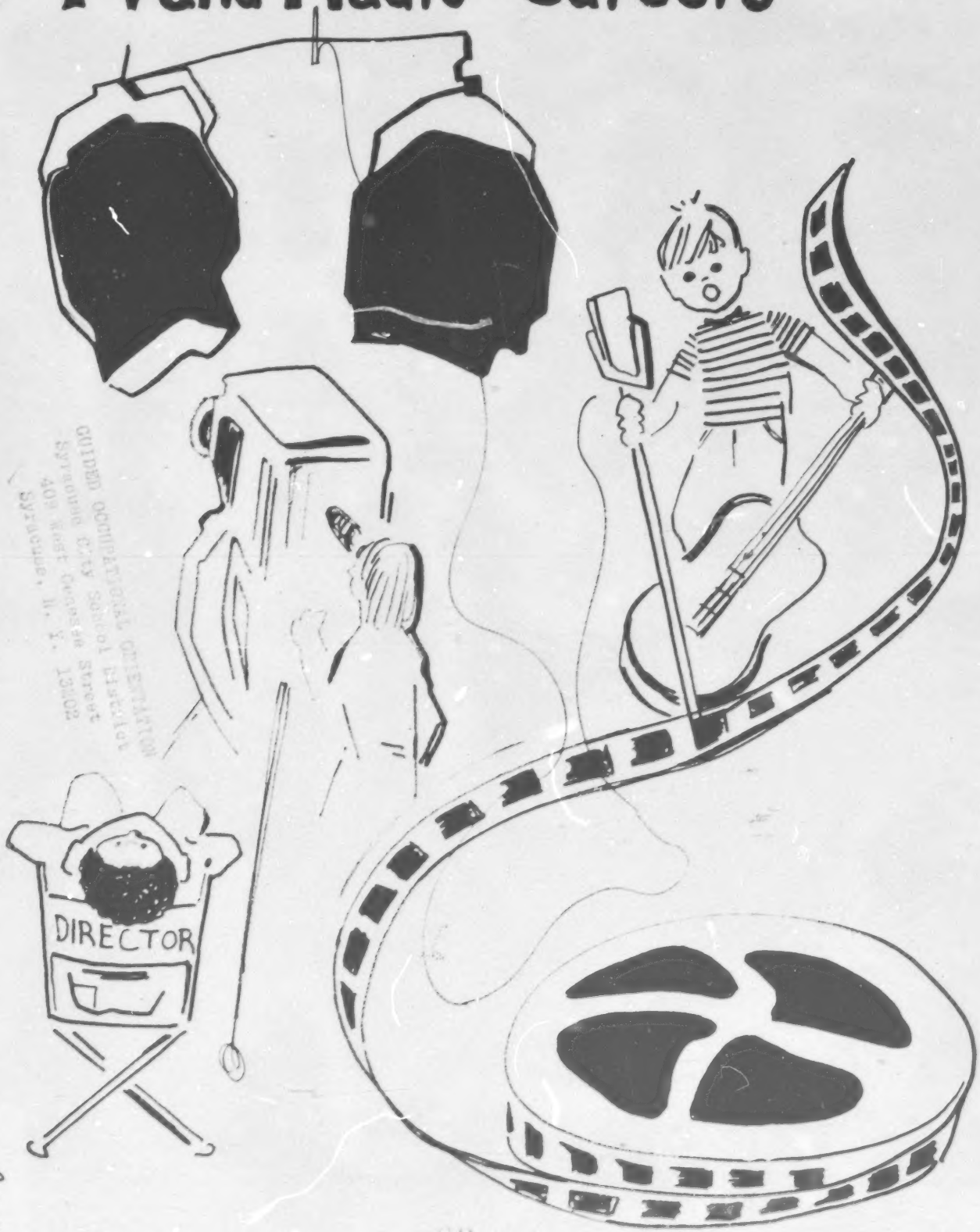
15. Are there school subjects that I must do especially well in if I were to work in this kind of job? _____

_____

_____

57

TV and Radio Careers



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Syracuse City School District
409 West Genesee Street
Syracuse, N. Y. 13202

VT 102 203
Book 3 of 3

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Syracuse City School District

TV and Radio Careers

Pre and Post Test

Choose the correct answer and write it in the blank

1. The person in charge of workers in the business office is the _____
   (director manager producer)

2. A person who buys time on television or radio shows is a _____
   (time salesman sponsor producer)

3. Radio-television time salesman sell time by the _____
   (hour day minute)

4. A broadcast technician takes care of _____
   (actors announcers equipment)

5. A broadcast technician needs the following education:
   _____
   (four years of college; high school; high school plus special training)

6. The most important requirement for an announcer is his _____
   (education training voice)

7 Hours for workers in TV and Radio are _____
   (regular irregular normal)

8. A person in TV and Radio who is most likely to be called on to work anytime is a _____
   (receptionist disk jockey manager)

9. The worker in TV and Radio who receives the highest starting pay per week is the)_____
   (broadcast technician; special effects technician; announcer)

10. The worker in TV and Radio who receives the lowest starting pay per week is the _____ _____
   (broadcast technician; speicial effects technician; announcer)

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NAME _____ SCHOOL _____

PRE _____ POST _____ TEACHER _____

T.V. AND RADIO - Pink

Assigned	Learning Activity	Done	Assigned	Enrichment	Done
Nature of Work					
1.	Description of radio-T.V. workers, pg. 1		1.	Matching exercise, pg. 11	
2.	Reading, copying information, pg. 2		2.	Checking T.V. program listings, pg. 12	
3.	Reading, worksheet, pg. 3				
4.	Reading, worksheet, pg. 4				
5.	Worksheet, answering questions, pg. 4a				
6.	Reading, writing job duties, pg. 5				
7.	Reading, finding word meanings, answering questions, pg. 6				
8.	Reading, answering questions, pg. 6a				
9.	Reading, worksheet, pg. 7				
10.	Reading, worksheet, pg. 8				
11.	Reading, worksheet, pg. 9				
12.	Completing sentences, rewriting word meanings, pg. 10				
Requirements					
1.	Reading, listing, checking facts, pg. 13				
2.	Reading, worksheet, pg. 13a				
3.	Reading, worksheet, pg. 14				
4.	Reading, answering questions, pg. 15				
5.	Worksheet, pg. 15a				
6.	Answering questions, copying information, pg. 16 & 16a				
	Answering questions, pg. 17				

T.V. AND RADIO - PINK

Assigned	Learning Activity	Done	Assigned	Enrichment	Done
Conditions					
1.	Copying information from the Yellow Pages, pp. 20 & 21		1.	"In Your Opinion", question and answer worksheet, pg. 23	
2.	Reading, worksheet, pg. 22		2.	Checklist of attitudes, pg. 24	
3.	Making a chart, pg. 22a				
4.	Reading, worksheet, pg. 22b				
5.	Worksheet, answering questions, unscrambling words, finding and using word meanings, pg. 22c & 22d				
Advantages					
1.	Obtaining information from a chart, pg.25a		1.	Opinion rating of T.V. programs, pg. 26	
2.	Worksheet, pg. 25a				

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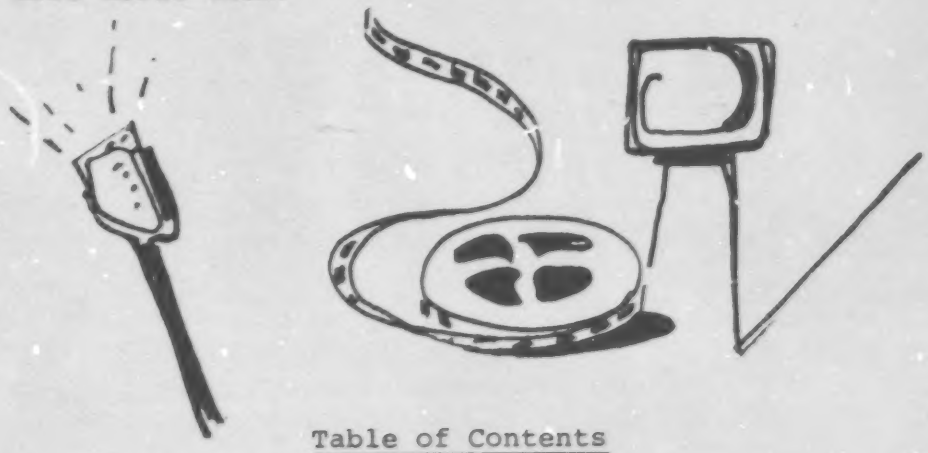
Syracuse City School District

T.V. and Radio Careers

When you turn on your radio or television set, have you ever thought of all the unseen people who are working behind the scenes? Maybe you would like to be one of those people. This study will tell you more about them.



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Topic:		Page:
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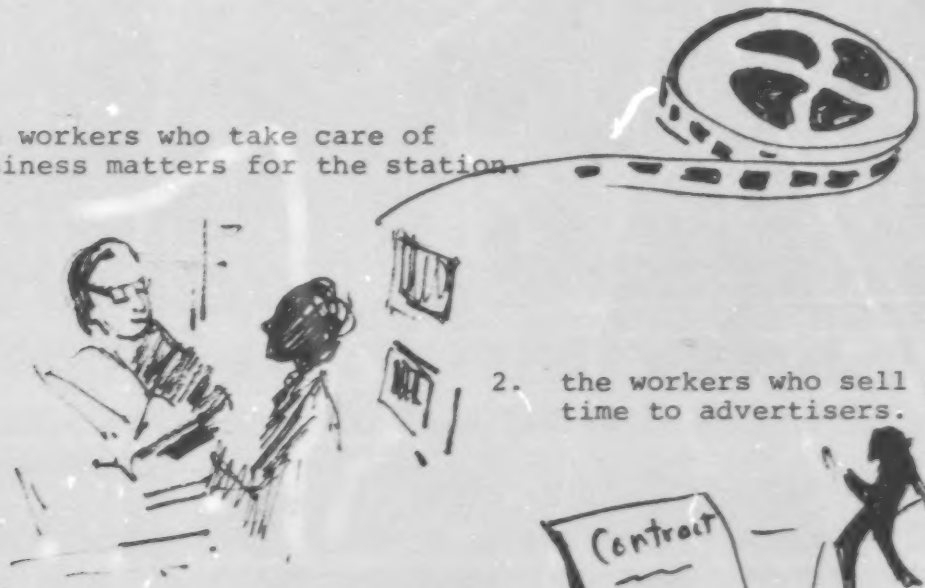
	Learning Activity	1
	Enrichment	11
II.	Requirements	
	Learning Activity	14
	Enrichment	20
III.	Conditions of Work	
	Learning Activity	22
	Enrichment	25
Iv.	Advantages (Future of Job)	
	Learning Activity	27
	Enrichment	28
	Bibliographies	
	Interview Sheet	
	Glossary	

Many people doing many different jobs work together in the radio and television industry. These workers may be divided in the following groups.

1. the workers who take care of business matters for the station.



2. the workers who sell program time to advertisers.

3. the workers who handle the equipment to put the program on the air.

4. the workers whose voices you hear and whose faces you see.

5. the workers who produce (or put together) the radio or television program.

A. If you were to visit a radio or television station the first person to greet you would be the receptionist.

In the book, Come to Work With us in a T.V. Station, on page 11 is a poem about a receptionist. Read the poem carefully.

Find the D.O.T. card numbered 82. The first sentence tells you what the receptionist does. *Copy the sentence here.*

The Receptionist _____

_____

Read the rest of the card to find one other thing the receptionist does.

Write that duty here. _____

_____

Find the S.R.A. Brief, Finding Out About Broadcast Technicians.

Read the second section headed, *Broadcast Technicians Do a Variety of Jobs*, to find two jobs Roger and Tom do.

Describe the jobs here.

1. _____

_____

2. _____

_____

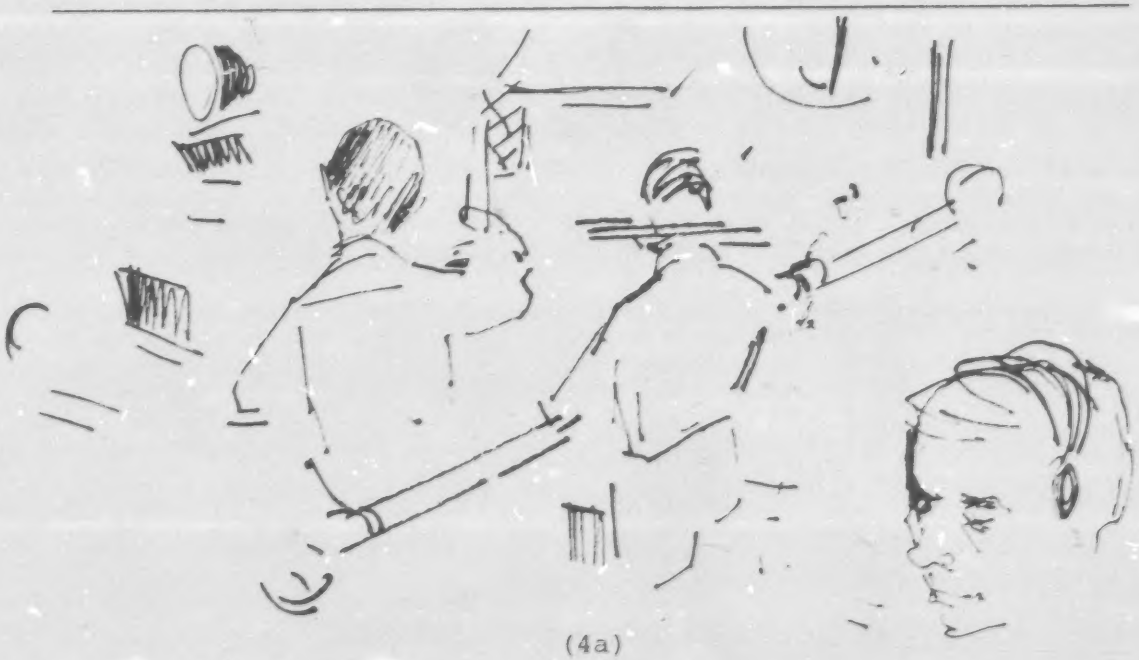
Another kind of technician is the Special Effects Technician. Read the S.R.A. brief, or listen to the tape about Special Effects Technician.

What kinds of special effects do you think would be needed for a Halloween program called the Whispering Willows?

_____

_____

_____



The voices you hear on the radio, and the faces you see on the television, are the announcers and entertainers.

D. Radio and Television Announcers

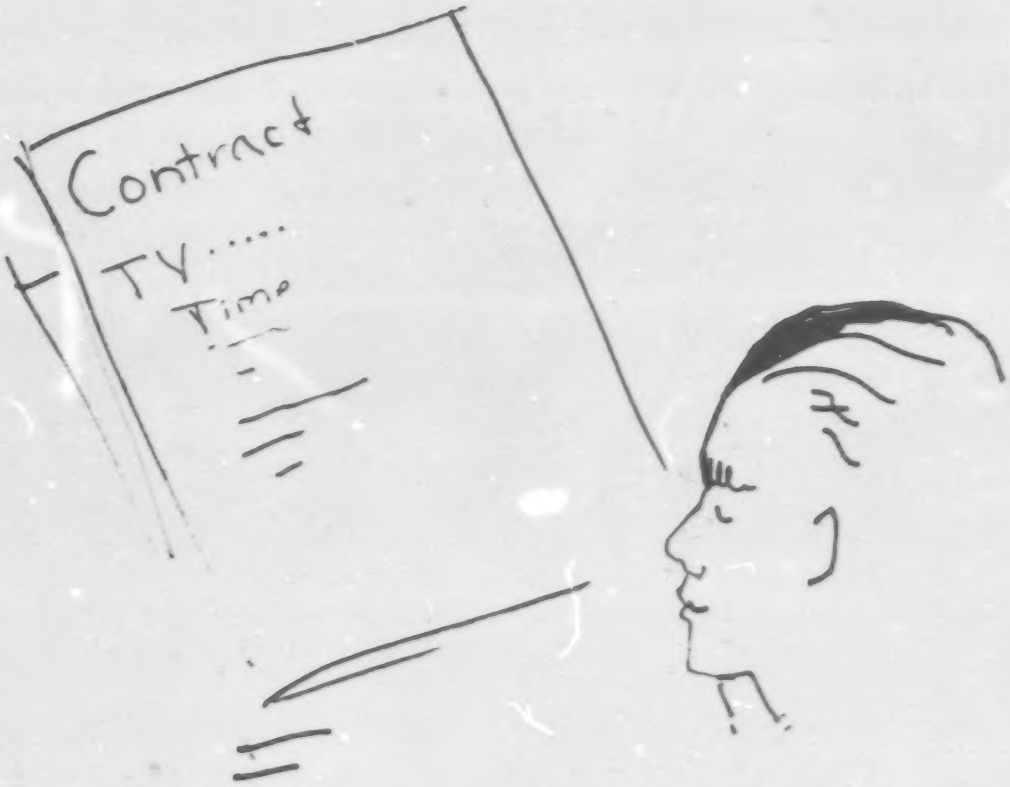
Find the D.O.T. card numbered 214. The first sentence tells five things that an announcer might do. *Read the sentence then fill in the blanks below.*

The Radio and Television Announcer

1. presents the _____ and _____.
2. introduces _____.
3. describes _____ _____.
4. interviews _____.
5. acts as _____ _____.

Find the S.R.A. brief, Finding Out About Radio-T.V. Time Salesmen. Read the first section to find out how Bob explains the time-salesman business. *Fill in the blanks:*

A radio-television time salesman sells _____ and _____ time to _____, _____ agencies and other _____. Without _____ _____, a _____ would have a hard time getting enough _____ to keep _____.



3. Engineering Department

A. Broadcast Technician

Read the D.O.T. card numbered 215, then fill in the blanks.

The Broadcast Technician ____ ____, _____and _____ _____ the electronic equipment used to _____ or radio or television _____.

Name five pieces of equipment a technician works with.

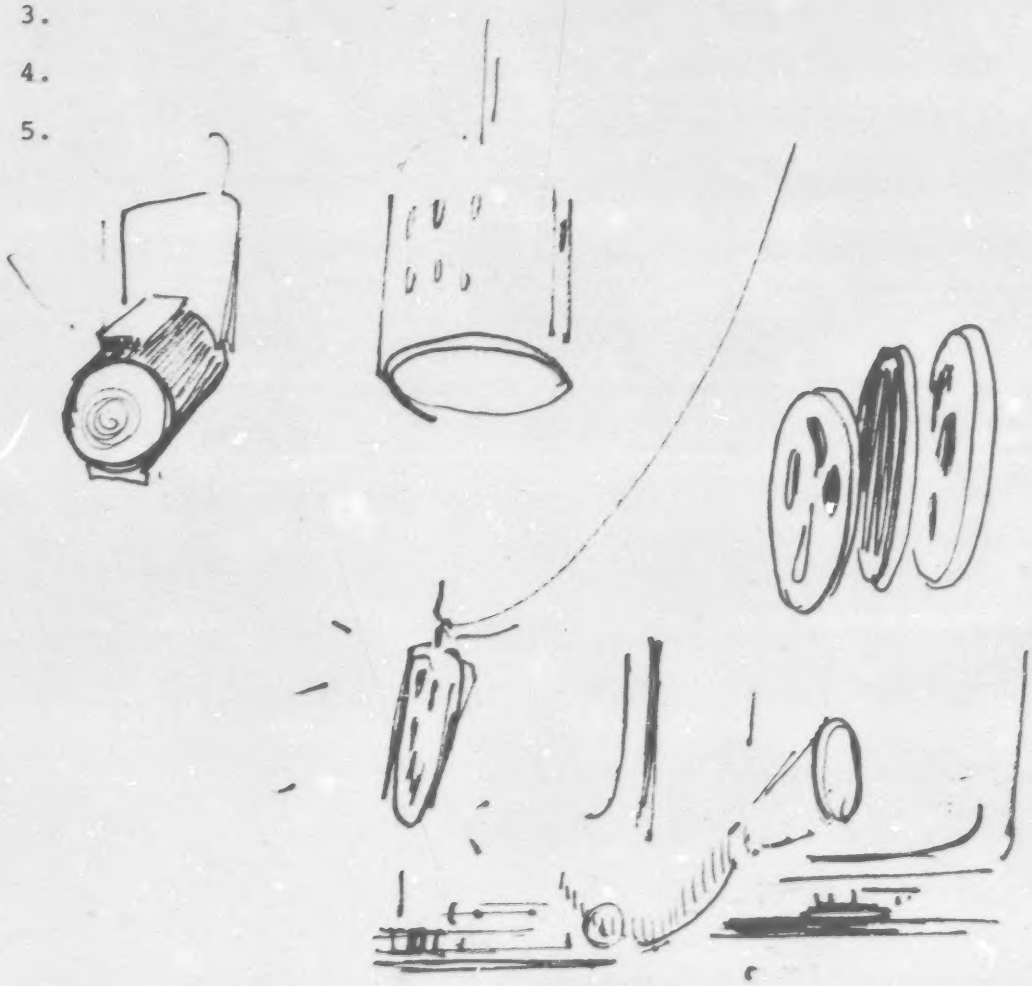
1.

2.

3.

4.

5.



Find the S.R.A. Brief, Finding Out About Broadcast Technicians.

Read the second section headed, *Broadcast Technicians Do a Variety of Jobs*, to find two jobs Roger and Tom do.

Describe the jobs here.

1. _____

_____

2. _____

_____

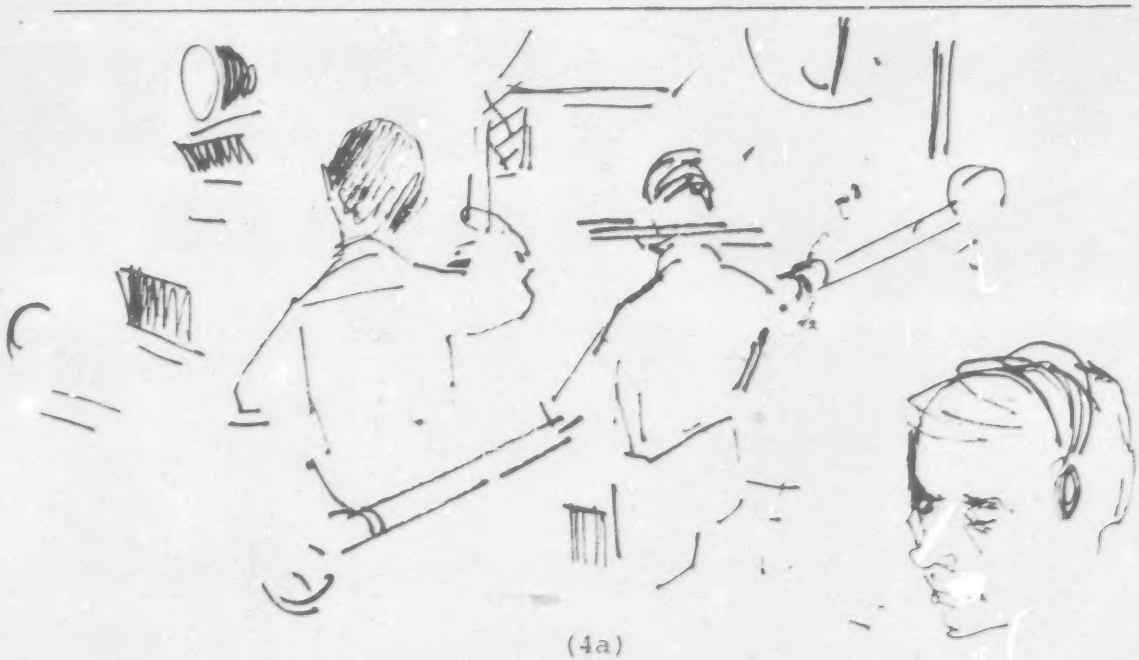
Another kind of technician is the Special Effects Technician. Read the S.R.A. brief, or listen to the tape about Special Effects Technician.

What kinds of special effects do you think would be needed for a Halloween program called the Whispering Willows?

_____

_____

_____



The voices you hear on the radio, and the faces you see on the television, are the announcers and entertainers.

D. Radio and Television Announcers

Find the D.O.T. card numbered 214. The first sentence tells five things that an announcer might do. *Read the sentence then fill in the blanks below.*

The Radio and Television Announcer

1. presents the _____ and _____.
2. introduces _____.
3. describes _____ _____.
4. interviews _____.
5. acts as _____ _____.

Some announcers are specialists. This means they only do one kind of announcing.

I. The station break announcer is on page 27 of the book, Come to Work with Us in a T.V. Station.

Read what he does, then complete the sentence.

I name the _____, read the _____, tell what is next to _____.

In the dictionary find the words and tell what they mean.

announce - _____

_____

view - _____

_____

II. Another specialist is the Newscaster. On page 35 of the book you have been reading, Come to Work with Us in a T.V. Statio , you will see what a newscaster does.

Read the poem, then write what a newscaster does.

_____

_____

T.V. AND RADIO

I. NATURE OF WORK
Learning Activity

Find the S.R.A. Brief, Finding Out About Radio and Television Announcers.

Read the last section headed *Jason Makes a News Broadcast*. What did Jason do to get ready for his news broadcast?

_____

_____

_____

III. The disc jockey is another specialist. He works on the radio.

Listen to the tape Disc Jockey and tell two jobs the disc jockey must do.

1. _____

2. _____

The Weather Girl is another specialist. On page 37 of the book, Come to Work With Us in a T.V. Station, is a poem about a weather girl.

What do you learn when you watch the weather girl?

_____

_____

E. In order to run any business smoothly there must be a boss or manager. In radio and television there are many managers.

1. The general manager or station manager is in charge of all the people in the station. Look on page 41 of the book, Come to Work with Us in a T.V. Station, to see what a Station Manager does.

   The boss says,

   "I have so much to _____."

2. The production manager could also be called the radio and television program producer-director. On the D.O.T. card numbered 362, the first sentence tells what the producer-director does.

   He _____ and _____ radio and television programs.

The second sentence tells <u>three</u> things he must do. *Read the sentence then fill in the blanks.*

The producer-director

1. chooses the _____.
2. _____ the _____ spent for the program.
3. takes care of _____ problems.

Find these words in the glossary. *Write the meanings in your own words.*

1. manage - _____

   _____

2. produce - _____

   _____

3. direct - _____

   _____

4. supervise - _____

   _____

Choose from the list the title of the announcer who is speaking.

A. station break announcer

B. disc jockey

C. newscaster

D. weather girl

____ "This program has been brought to you by Sudsy Wudsy Soap."

____ "Cool and Cloudy tonight with a high of 50 degrees."

____ "President Nixon met with newsmen this morning."

____ "You are listening to WABC, Channel 10 in New York."

____ "Now number 6 from the survey, Ding-a-ling Baby by the Bells."

____ "A fire on Main Street this morning destroyed an empty garage."

____ "Rainy and warm today, clearing and cooler tonight."

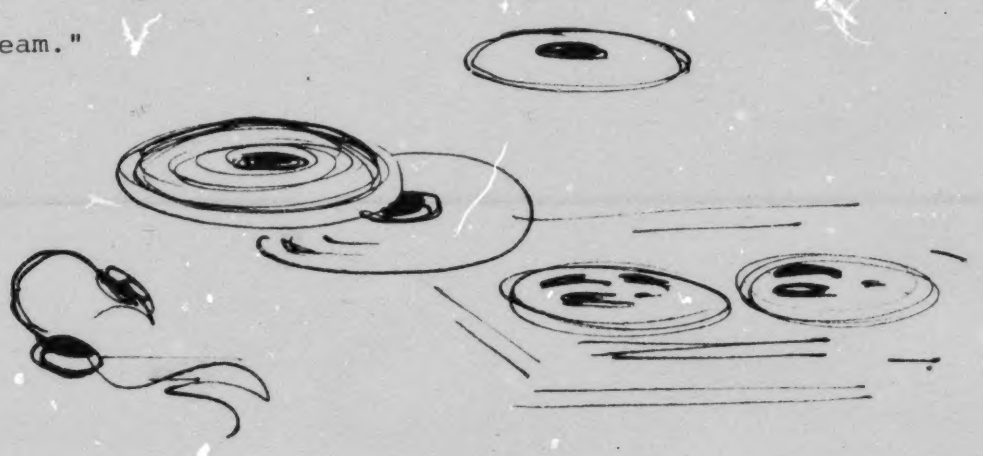
____ "Two tickets to the rock concert for the fourth caller on the hit line."

____ "Next on WDFL The Abigal Adams show."

____ "A three car accident on highway 4 has injured two people."

____ "Winds north to northeast at seven miles per hour."

____ "Now Country Joe and the Fish singing Down By the Old Mill Stream."



Listed below are 20 different kinds of television programs. Put a check mark ( ) beside the kinds of programs you like to watch. Put a double check mark ( ) beside the kinds of programs you don't like to watch.

____ 1. News and weather

____ 2. Western movies

____ 3. Horror movies

____ 4. Children's shows

____ 5. Cartoons

____ 6. Situation comedies (Lucy etc.)

____ 7. Sports

____ 8. Quiz shows

____ 9. Dramatic programs

____ 10. Musical shows

____ 11. Variety shows (Sullivan etc.)

____ 12. Comedy shows (Skeleton etc.)

____ 13. Religious programs

____ 14. Teenage dance shows

____ 15. Educational programs

____ 16. Wrestling and boxing

____ 17. Soap operas

____ 18. Detective and police drama

____ 19. Documentaries

____ 20. Panel shows (What's My Line)

A. Receptionist

The D.O.T. card numbered 82, will tell you how much education a receptionist needs.

To be a receptionist you will need a _____ _____ diploma.

Name two subjects you should take in high school.

1. _____

2. _____

Look on Page 11 in the book, Come to Work with Us in a T.V. Station. The receptionist has to be pleasant. She has to _____ and be _____.

Check the things a person who would make a good receptionist would like.

____ dogs

____ people

____ being alone

____ talking

____ working outdoors

On the back of the S.R.A. brief, Finding Out About Receptionists, find the section headed Getting Started.

What are two things that can take the place of experience when looking for a job?

1. adequate _____
2. good _____

B. Sales

Find the S.R.A. card, Finding Out About Radio-Television Time Salesmen. Look in the upper left hand corner of the cover to find out how much education a salesman needs.

Write it here.

_____

On the back of the card find the words High School Courses.

What are three of these courses?

1. _____
2. _____
3. _____

What kind of person would make a good salesman?

Check the traits you think a salesman needs.

____ likes meeting different people

____ likes to build things

____ is impolite and pushy

____ has a good imagination

____ likes to work alone

____ can talk to many different kinds of people

C. Broadcast Technicians

On the D.O.T. card numbered 215, you can find how much education a technician needs.

Write it here.

_____

Name two subjects which are required.

1. _____

2. _____

Who would make a good broadcast technician?

1. Mary, John and Bob are watching television.

Mary says, "I would like to dance like that."

John asks, "How do they decide which picture to broadcast?"

Bob wants to know, "Is there any cake left?"

Which do you think would like being a broadcast technician?

_____ Mary

_____ John

_____ Bob

When the radio stopped working Pam was sad. She would miss Tommy Towers Tap Tunes, her favorite program. Joe decided the old radio should be thrown out. A new one would look nicer anyhow. Fred said that he would try to fix it. Maybe it only needed a new part.

Who do you think would like to be a broadcast technician?

_____ Joe

_____ Fred

_____ Pam

Find the S.R.A. brief, Finding Out About Broadcast Technicians. On the back, read the section headed Technical School Courses.

What kind of examination must the broadcast technician take?

_____ _____ _____ _____

Name three kinds of courses a technician takes to help him pass the test.

1. _____
2. _____
3. _____

The special effects technician studies different subjects. Find the S.R.A. brief, Finding Out About Special Effects Technicians. On the back read the section headed College Courses. Name 4 courses that will help the special effects technician.

1. _____
2. _____
3. _____
4. _____

D. Radio and Television Announcers

On the D.O.T. card numbered 214, you will see that an announcer needs a high school diploma plus some further training. Look down the right side of the card until you come to words in big black letters.

What education does the announcer need after high school?

2 years _____ or _____ college.

What is the most important thing an announcer needs?

The answer is easy - his voice of course!

In the book, Come to Work With Us in a T.V. Station, on page 35 is a poem about a newscaster, a special kind of announcer. The last line of the poem tells how an announcer must speak.

Copy that line here.

_____

What would happen if the announcer did not speak up loud and clear?

_____

_____

D. Radio and Television Announcers

Find the S.R.A. brief, Finding Out About Radio and Television Announcers. On the back read the section headed Education.

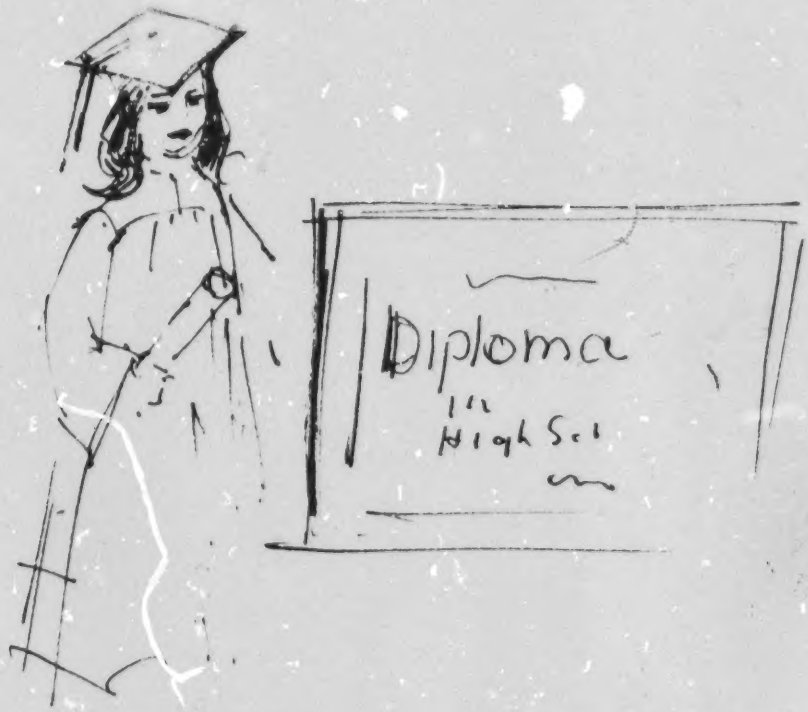
Why is a college degree recommended?

_____

_____

E. To be a Radio and Television Program Producer-Director a person must have a high school diploma.

The chances of getting a job are better if you have more education. Look on the D.O.T. card numbered 362. Toward the end of the column at the right is some further education that would help.



A producer-director could have a 4 year college, Bachelor of Science or Bachelor of Arts degree in _____, _____ or _____ _____.

Try reading these sentences as clearly as you can. Practice in front of a mirror or with a friend. When you can read them well perhaps you could tape your voice, then listen to how you sound.

HOW'S YOUR SPEECH?

Say each of the sentences below five times. Try to say them clearly and distinctly.

1. Give the goose a golden egg.
2. Sing a song while you are walking along.
3. The happy horse held his head high.
4. Please leave the cheese in the deep freeze.
5. Ned bet Ted that he would get a wet head.
6. Sid hid his bib in the big crib.
7. Jake didn't dare to repair the chair on the stair.
8. Jack sat with the bat and the cat.
9. He heard her first and third words.
10. Laura sat alone upon the comfortable sofa.

When You Talk

How would you rate your speech? Below is a list of questions about speech. Rate yourself and you will know what you need to work on.

QUESTIONS	RATING		
	OFTEN	SOME-TIMES	NEVER
1. Do you speak clearly and distinctly?			
2. Do people have to ask you to repeat what you have said?			
3. Do you speak too quickly?			
4. Do you speak too slowly?			
5. Do you like to talk a lot?			
6. Do you like to keep quiet and let others talk?			
7. Do you use a good choice of words in your conversation?			
8. Do you speak in a low, pleasant voice?			
9. Do you wish your speech could be better than it is?			
10. Do you find it hard to put what you think into words?			
11. Do you talk too loudly?			
12. Do you speak with excitement and interest?			

There are radio and television stations in all large cities and in most smaller cities. Look in the telephone book for the names of the radio and television stations in Syracuse. To find the names of the stations, look in the YELLOW PAGES.

First, find the word radio at the top of the page. Then, look for the heading Radio Stations and Broadcasting Companies.

Pick four radio stations.

Write the names and addresses here.

1. _____

_____

2. _____

_____

3. _____

_____

4. _____

_____

Now find the word television at the top of the page. Then find the heading, Television Stations and Broadcasting Companies.

Choose 4 television stations.

Write the names and addresses here.

1. _____

_____

2. _____

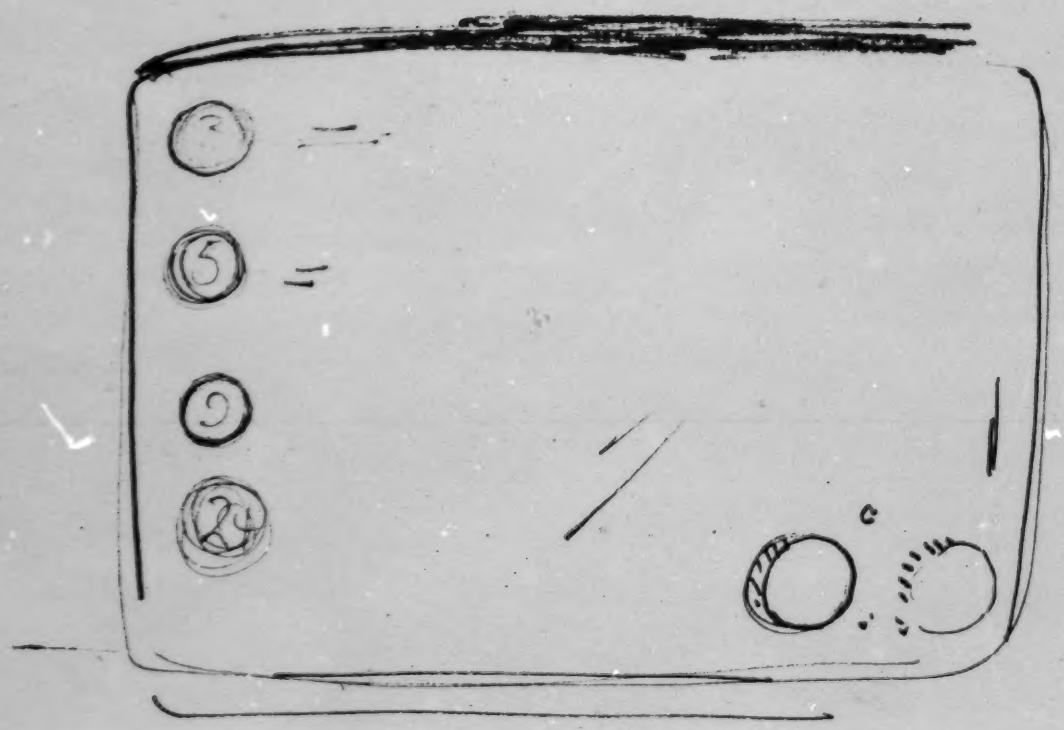
_____

3. _____

_____

4. _____

_____



Hours

Many workers in the radio and television industry must work at night and on weekends.

To find the answers to these questions, look on the back of the S.R.A. briefs under the heading Number Of Hours.

1. The Receptionist works ____ to ____ hours a week.
2. The Radio-Television Time Salesman usually works a ____ day, _____ hour week.

   When might he work on the weekend or in the evening?

   _____

3. The S.R.A. brief, Radio and Television Announcers, says that an announcer's hours might be irregular.

   Look the word irregular up in the dictionary.

   Write the meaning in your own words.

   _____

   _____

4. The radio disc jockey may work anytime. In the S.R.A. brief, Finding Out About Disc Jockeys, under the heading Working Hours, you will learn when a disc jockey might work.

   When might he work?

   1. early in _____
   2. late at _____
   3. on _____

   How many hours does he work each week? _____

Make a chart using the information you have found about the number of hours the different people work.

	NUMBER OF HOURS WORKED EACH WEEK
Receptionist	
Salesman	
Announcer	
Disc Jockey	

Get all the S.R.A. briefs in the Radio and Television Careers folder.

You should have:

Broadcast Technicians

Disc Jockeys

Radio and Television Announcers

Radio-Television Time Salesmen

Receptionists

Special Effects Technicians

Use the information on the back of these briefs to complete the following sentences.

1. Broadcast Technicians: There are more than _____ radio stations and _____ television stations in the United States.

   Use the figures from question #1 to find this answer:

   The number of radio stations is about _____ times greater than the number of television stations.

2. Disc Jockeys: Disc jockeys may be employed by _____ or by local _____. Many well-known disc jockeys can earn extra money by serving as _____ of _____ at dances and _____ _____.

   Some disc jockeys work a split shift. For instance, they may break into two different 4 hour shifts. Can you make up a schedule with two 4 hour shifts in one 24 hour period? Plan this so that the shifts come when you think the most

people will be listening to this type of show.

MONDAY:	1ST SHIFT (4 HOURS)	2ND SHIFT (4 HOURS)
	From _____(A.M. -P.M.)	From _____ (A.M.-P.M.)
	To _____(A.M. -P.M.)	To _____ (A.M._P.M.)

3. Radio and Television Announcer: More announcers are employed in _____ and _____ than in other states.

   Getting ahead as an announcer requires hard _____, _____, and a great deal of _____.

4. Radio-Television Time Salesmen: A great number of jobs are in _____ _____ such as New York and Chicago, but experience can be obtained in _____ _____ _____.

   A time salesman may enter the field as a _____ or a _____ _____ and move up to a _____ sales job. Advancement deals mainly on the _____ and _____ of the individual.

Look up the word "initiative" in the glossary.

Copy the meaning here:

_____

_____

_____

Use your initiative to unscramble the following words into a sentence.

of using The initiative initials Inez in was during initiation instilled the

5. Receptionists: Most receptionist jobs are found _____ and _____ cities.

Name four types of offices in which receptionists may be employed:

(1) _____

(2) _____

(3) _____

(4) _____

Adequate _____ _____ and good _____ _____ will often be accepted in place of _____.

6. Special Effects Technicians: Jobs are found wherever _____, _____ _____, or _____ programs are produced. Three cities that offer most opportunities for special effects technicians to find work are;

(1) _____

(2) _____

(3) _____

In Your Opinion:

Do you think there are too many commercials on television?

_____

_____

_____

Are there any particular products which you feel should not be advertised on television? _____

If your answer is yes, tell what those products are, and give reasons why.

_____

_____

_____

_____

During commercials on television, many people go to the refrigerator to get something to eat. What do you usually do during television commercials?

_____

_____

_____

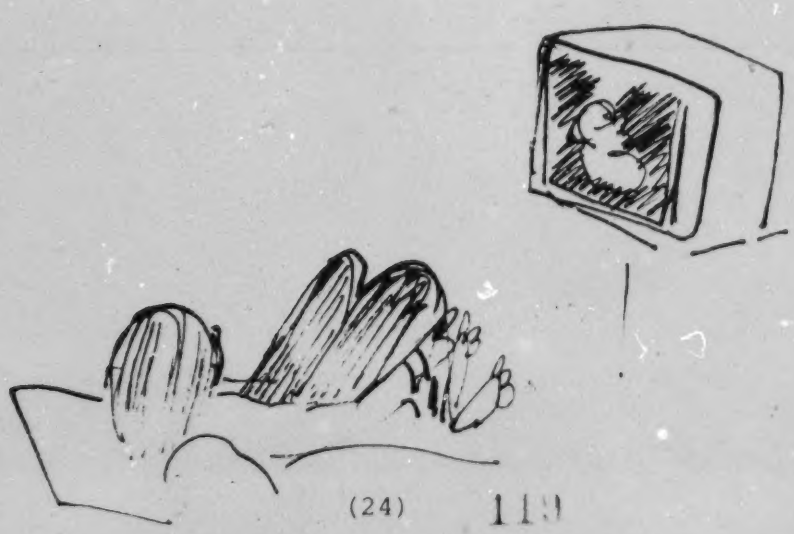
_____

When You Watch Television

When you watch television or listen to the radio, how does it generally make you feel? Below are some words. Check the ones that tell how you feel most of the time when you watch television or listen to the radio. *(If you have trouble reading these words, ask your teacher if you may work with a partner.)*

_____ good
_____ wonderful
_____ anxious
_____ sleepy
_____ peaceful
_____ entertained
_____ relaxed
_____ satisfied
_____ fearful
_____ joyful
_____ informed
_____ excited
_____ angry

____ thrilled
____ rested
____ sad
____ amused
____ contented
____ calm
____ upset
____ terrified
____ interested
____ confused
____ fascinated
____ disappointed



Average Starting Pay - Per Week

Receptionist	$ 87.50
Radio-Television Time Salesman	87.50
Broadcast Technician	65.00
Special Effects Technician	160.00
Radio-Television Announcer	80.00
Disc Jockey	90.00

Use the chart to answer these questions.

1. Which worker has the highest starting pay?

   _____

2. Which worker has the lowest starting pay?

   _____

3. How much more does a disc jockey earn than a radio-television announcer?

   _____

4. If you were a broadcast technician and your friend were a receptionist, what would the total of both salaries be?

   _____

Get the S.R.A. brief, Broadcast Technicians. Read the section on the back, entitled "Future".

Put T for true or F for false in front of the following:

_____ Fewer stations are expected to go on the air in the coming years.

_____ Automation may cause a decrease in the number of technicians.

_____ The field is limited.

_____ Competition for the jobs is not great.

Get the S.R.A. brief, Radio and Television Announcers. Read the section on the back, entitled "Future".

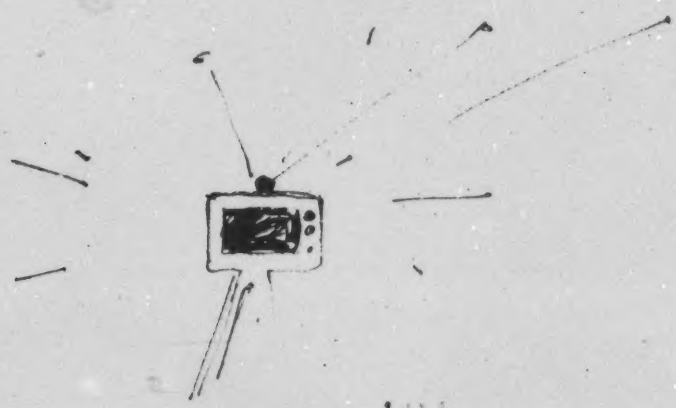
Put T for true or F for false in front of the following:

_____ Radio and Television stations are not expected to expand their operations in the years ahead.

_____ The growth of the industry and replacement needs will create about 800 to 900 openings for announcers each year.

_____ Competition is keen.

_____ There will not be jobs available.



How Critical Are You?

Listed below are some of the standards the people have when they watch television or listen to the radio.

Check the ones that you feel most strongly about.

The programs must:

_____ (a) have an interesting story

_____ (b) have few commercials

_____ (c) instruct or inform you

_____ (d) have excellent acting

_____ (e) be exciting

_____ (f) be funny

_____ (g) appeal only to adults

_____ (h) last at least an hour

_____ (i) be unusual

_____ (j) appeal only to teenagers

_____ (k) relax you

_____ (l) not make you think

_____ (m) be dramatic

_____ (n) appeal only to children

_____ (o) be live, not taped

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

T.V. AND RADIO

Bibliography

SRA Brief

- Broadcast Technician
- Disc Jockeys
- Radio and Television Announcers
- Radio-Television Time Salesmen
- Receptionist
- Special Effects Technician

Career Summary (S-115)

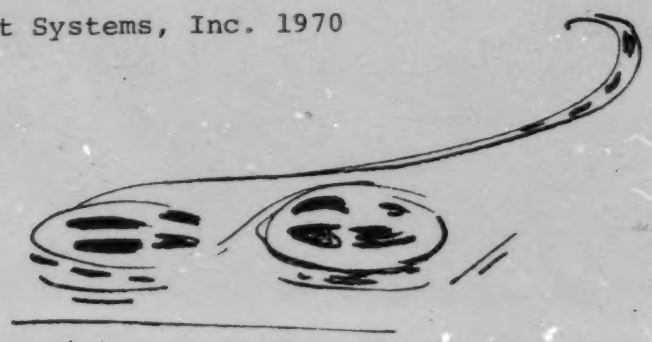
- Radio and Television Technician

D.O.T. Cards

- 82 Receptionist
- 214 Radio and Television Announcer
- 215 Radio or Television Broadcast Technician
- 362 Radio and Television Program Producer-Director

Book

Wilkinson, Jean and Ned, Come to Work With Us in a T.V. Station
Sextant Systems, Inc. 1970



GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

Glossary — T.V. and Radio

advertise - to make known to other people.

advertising agency - a business that tries to sell certain products for people by advertising them.

announcer - one who tells something out loud.

audio - what you hear.

automation - work done by machines rather than by people.

broadcast - to send a program out by radio or television.

commercials - messages on television or radio that sell products.

competition - a contest between two people for the same thing.

direct - to show the way.

director - is someone who shows others the way to do things such as how to act.

effects - results of action. "Special Effects" are created for radio and television programs to help achieve a special feeling.

electronic - a special kind of electrical energy.

engineer - a person who plans or builds or takes care of things.

equipment - tools and machinery needed to make things run.

initiative - the ability to do things on your own; to see what should be done and to go ahead and do it.

irregular - not in a regular way, something that happens in a hap-hazard way.

manage - to be in charge; a manager is a person in charge.

newscaster - someone who reads the news out loud.

operate - to run something; to make something go.

producer - a person who supplies the money or is in general charge of radio or television shows.

receptionist - a person who greets and helps people who enter an office.

specialist - a person who is skilled in one particular area.

Glossary (cont.)

sponsor - an advertiser who pays a television or radio station to announce his product.

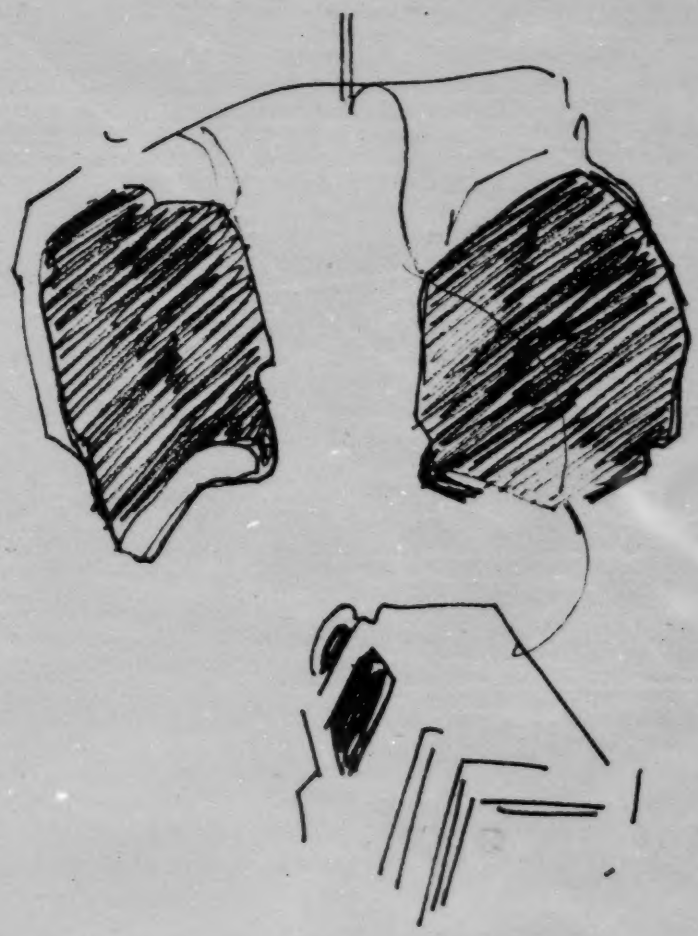
studio (station) - place where television and radio shows come from.

supervise - to see that things run right; to be in charge of something.

technician - a person who is trained to work with tools or in some special area.

video - what you see.

view - to see.



GUIDED OCCUPATIONAL ORIENTATION

STANDARD INTERVIEW SHEET

1. What is your name? _____

2. What is your job title? _____

3. How much education did you have to have for your job? _____

_____

4. Did you have to take a test for your job? _____

5. What are some of your duties? _____

_____

6. Do you mind telling what the starting salary for your job is?

_____

7. What is the top salary your job pays? _____

8. Is the salary the same for everyone on this type of job? _____

9. Who or what decides when you get a raise? _____

_____

10. Why did you choose this job? _____

_____

11. What do you like best about your job? _____

_____

12. What do you like least about your job? _____

_____

13. What are your working hours? _____

14. What good habits should I develop now in elementary school that would help me to become a successful worker when I grow up? _____

_____

_____

15. Are there school subjects that I must do especially well in if I were to work in this kind of job? _____

_____

_____

ACCESSION NUMBER: VT102204

TITLE: BEAUTY CARE AND COSMETOLOGY.

DESCRIPTOR: *GRADE 6; *OCCUPATIONAL INFORMATION; *COSMETOLOGY; *CAREER EDUCATION; PRETESTING; POST TESTING; WORKSHEETS

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 70P.; RELATED DOCUMENTS VT 102 201 THROUGH VT 102 204 IN THIS ISSUE.

ABSTRACT: PRETESTS AND POST TESTS ON CAREERS IN BEAUTY CARE AND COSMETOLOGY ARE PRESENTED AS PART OF THE SYRACUSE (NEW YORK) CITY SCHOOL DISTRICT'S GUIDED OCCUPATIONAL ORIENTATION PROGRAM. THREE BOOKLETS ARE INCLUDED FOR GRADE 6 INSTRUCTIONAL LEVELS: A BLUE BOOKLET FOR BELOW GRADE LEVEL PUPILS, YELLOW FOR AVERAGE, AND PINK FOR ABOVE AVERAGE LEVEL. ALL THREE LEVELS CONTAIN LEARNING ACTIVITIES TAILORED FOR THE LEARNER AT EACH LEVEL. LEARNING ACTIVITY TOPICS INCLUDE NATURE OF WORK, REQUIREMENTS, CONDITIONS OF WORK, AND ADVANTAGES (FOR THE JOB). (MF)

INSTITUTION NAME: SYRACUSE CITY SCHOOL DISTRICT, N.Y.

VT 102 204

51

Beauty Care and Cosmetology

GUIDED COMMUNICATIONS ORIENTATION
Syracuse City School District
409 West Genesee Street
Syracuse, N.Y. 13202

VT 102 204
Book 1 of 3

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

Cosmetology

Pre and Post Test

Choose the correct answer and write it in the blank.

1. A receptionist makes _____ for customers.

   shampoo | hairstyles | appointments

2. A colorist changes the color of the customers _____.

   hair | skin | fingernails

3. Pressing is done to _____.

   rubber gloves | curly hair | curly clothes

4. A manicurist grooms _____.

   hair | fingernails | scalp

5. To be a beauty operator you must be at least _____ years old.

   17 | 18 | 21

6. All beauty operators must have a _____.

   license | high school diploma | college diploma

7. A beauty operator's license comes from _____.

   New York State | beauty school | high school

8. One reason why a beautician's work is hard is that she must please _____.

   mainly her boss | all kinds of people | one customer at a time

9. The pay for a beautician is usually _____ a week.

   $60-70 | $80-100 | $100-120

10. _____ _____ is usually available for beauticians.

    a uniform | part-time work | early retirement

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

NAME _____ SCHOOL _____

PRE _____ POST _____ TEACHER _____

COSMETOLOGY - Blue

Assigned	Learning Activity	Done	Assigned	Enrichment	Done
Nature of Work					
1.	Reading, listening to a tape, answering questions. p.p. 1&2		1.	Make a scrapbook of magazine pictures. pg. 8	
2.	Answering questions, pictionary. pg. 3		2.	Make a scrapbook of hairstyle pictures you have named. pg. 8	
3.	Pictionary. pg. 3a		3.	Planning a demonstration of setting hair. pg. 9	
4.	Reading, listening to tape. pg. 4				
5.	Pictionary, listening to tape. pg. 5				
6.	Reading, answering questions. pg. 6				
7.	Reading, worksheet. pg. 7				
Requirements					
1.	Reading and worksheet, pg. 10 and 10a		1.	Listing beauty schools. pg. 12	
2.	Word meaning, listing requirements, writing sentence. pg. 11		2.	Planning a visit to your class by students from Central Tech	
Conditions					
1.	Reading - listing reasons. pg. 13		1.	Reading and listening to tape. pg.14	
Advantages					
1.	Reading and worksheet. pg. 15		1.	Crossword puzzle. pg. 16	

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

Did you know that hairdressing and related jobs hire 20,000 new people every year in the United States?

Have you ever thought you would like to work in a beauty salon (shop)?

To find out how to learn the trade - and how to succeed as a "beauty specialist".....read on!!

Table of Contents

Topic:	Page:
I. Nature of Work	
Learning Activity	1
Enrichment	8
II. Requirements	
Learning Activity	10
Enrichment	12
III. Conditions of Work	
Learning Activity	13
Enrichment	14
Iv. Advantages (Future of Job)	
Learning Activity	15
Enrichment	16
Bibliographies	
Interview Sheet	
Glossary	

1. Get the cassette tape on "Careers in the Beauty Industry".

Read the following story as you listen to the tape.

Have you ever been in a beauty salon or looked through the window of a beauty salon? Or, have you noticed women and girls walking by and have you thought that their hair looked real pretty? Do you know how many different kinds of jobs are needed to keep a beauty salon going so that those ladies can have nice-looking hair? Do you think you might like to work in the beauty industry? If you have, let's open the door and go in to see what makes a beauty salon tick.

SECTION 1

When we first enter the beauty salon, probably the first person we will meet is the RECEPTIONIST (ree-sept-shun-ist). She will have a desk with a telephone so that she can make appointments for customers and be sure they are taken good care of by the right hairdresser and on time!

The RECEPTIONIST also collects the money from the customers and usually takes care of selling COSMETICS which can be seen on shelves in the salon. The RECEPTIONIST usually keeps track of the hours the employees work, the amount of money they have earned and, sometimes, even makes up the payroll. The RECEPTIONIST may, in fact, be the salon owner or manager or she may be an employee. It can be an important and well-paid job.

TURN OFF THE TAPE RECORDER WHILE YOU ANSWER THE FOLLOWING QUESTIONS:

Duties of a receptionist:

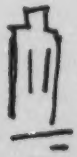
1. A receptionist makes _____ for customers.
2. She makes sure they are _____ _____ _____ of by the right hairdresser...and on time!
3. The receptionist also _____ the _____ from the customers and usually takes care of selling _____.

4. The receptionist usually keeps track of the _____ the employees work, the amount of _____ they have earned, and sometimes even make up the _____.

5. The receptionist may, in fact, be the _____ _____ or manager, or she may be an _____.

Pictionary --- about the Beauty Business!

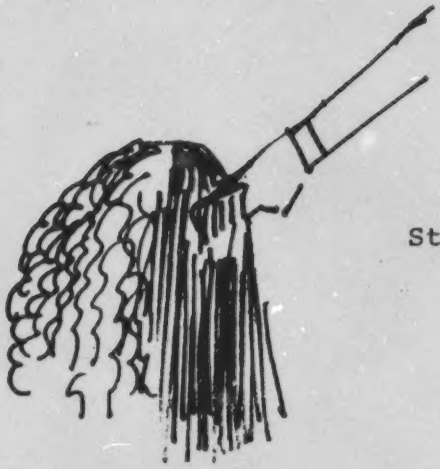
Shampooer - washes hair.



Hairstylist - cuts and styles hair.

Permanent Waver - puts curl in hair to stay in permanently.

Colorist - colors (dyes) hair.



Straightener - "presses" or takes curl out of hair.

NOW: turn the tape back on and listen to it as you read more about our visit to the beauty salon:

SECTION 2

As we get farther back into the salon, we will see men and women working on customers' hair. In large shops these men and women may be specialists - they ordinarily do only the job that you see them doing. SHAMPOOERS, they wash and clean the hair for different reasons; apply rinses either for dandruff or for a different color; and generally assist the HAIRSTYLIST who cuts and arranges the hair to make a lady look her best. We also see the COLORIST. She has on rubber gloves and a plastic apron and she is applying a thick, dark cream on the hair to make it the color that the STYLIST wants. At another chair a PERMANENT WAVER is rolling up hair on short, different-colored plastic curlers and then applying a liquid to the curls. The liquid doesn't smell too good, but it makes the hair pretty.

In still another chair another hairdresser wearing rubber gloves and a plastic apron is putting heavy, white cream on the hair. She is the STRAIGHTENING specialist. When hair is too curly or kinky for a certain style, curl must be taken out of the hair. Sometimes the STRAIGHTENER will use a hot, brass comb to take out the curl. This is called PRESSING.

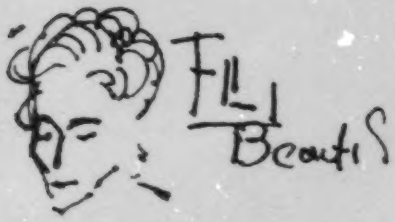
Turn off the tape recorder.

Pictionary ---- about more beauty salon workers!

Manicurist - cleans, shapes, and polishes fingernails

Dispensary Clerk - hands out supplies

Chief Stylist - either the owner or manager



NOW: turn the tape back on and listen to it as you read about these workers.

Section III

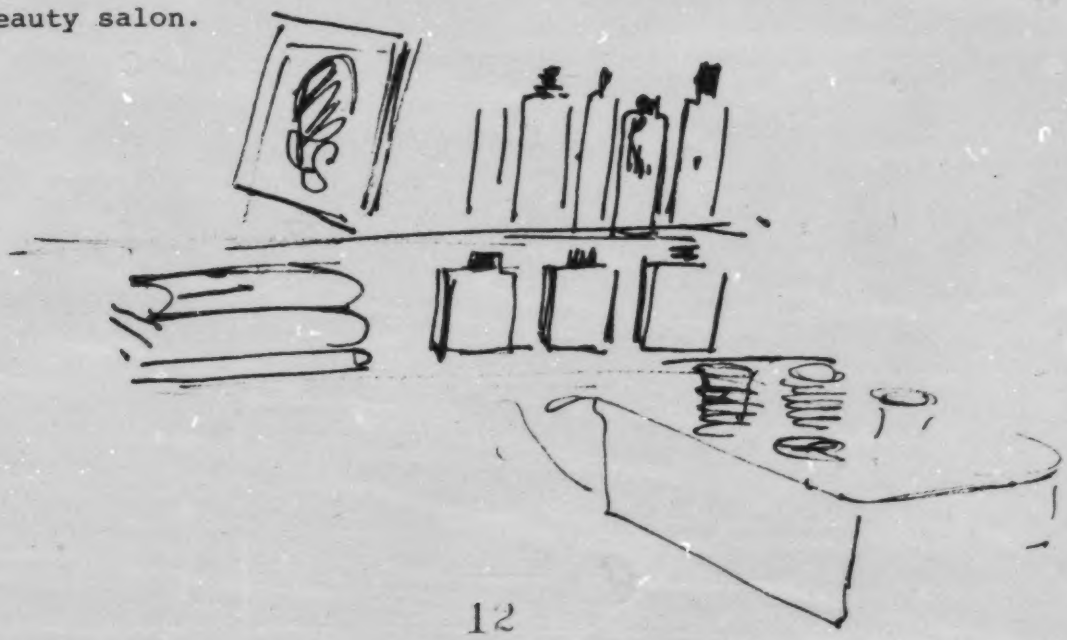
As we look over toward the dryers (dryers are hot-air hoods which fit over the customer's head to dry the hair - they look like space helmets), we see another person working on a customer's fingernails. She is called a MANICURIST and she clips and files fingernails, softens and grooms the customer's hands.

Back in the shop we discover a small room. It is well-lighted and ventilated. There is a sink and counter and lots of shelves, cabinets and containers all filled with bottles, cartons, linen and all sorts of things needed to work on customers and to keep the tools and containers clean. The person working in here is called a DISPENSARY CLERK.

We also have seen a man in a zipper jacket walking about the shop talking to different SPECIALISTS, looking at customer's hair and writing things on small cards. He is the OWNER or CHIEF STYLIST. What we have been looking at is a large shop with twenty or thirty people working in it. In a small shop (three or four people) the same type of things will be going on except there will be no specialists. The people working in a small shop perform all of these operations and are called ALL-AROUND OPERATORS.

Answer these questions from Section III

1. Dryers are _____ _____ hoods which fit over the customer's head to _____ the hair.
2. A manicurist _____ and files fingernails, _____ and _____ the customer's hands.
3. A _____ _____ handles and gives out bottles, linen and all other supplies used in the beauty salon.



Get the Career Summary, Manicurist.

Complete the following from the section "Duties":

A manicurist usually works in a _____ _____ or _____ _____. She _____, shapes, and _____ a customer's fingernails and, sometimes, _____ . She _____ and _____ the end of the nails. She softens the nail _____ with water and oil, pushes them back with a _____ _____, and _____them with _____ or nippers. She then _____ the nails or applies clear or colored _____ _____ with a brush.

After each manicure she _____ and _____ the instruments used by placing them in an _____ solution.

Manicuring may be done by a _____ in a shop or by a _____ beautician.

1. Go through magazines and cut out any pictures or words that have something to do with hairdressing or care of the nails and skin.

   Cut these out and make a scrapbook of them.

2. Cut pictures of hair styles from magazines. Make up a title for each style.

   Make these up into a scrapbook.

With a partner from your class, practice setting hair from the chart in the brown folder. Ask your teacher if you may plan a demonstration for your class.

New York State Rules

To Become A Beauty Operator You Must Meet The Following Requirements"

1. You must be 17 years of age or older.
2. You must successfully have completed an approved course of study such as is offered at Syracuse Central Technical High School or as is offered in a private trade school.
3. You must be of good moral character.
4. You must be in good health.
5. You must have at least finished an elementary school education.

Get the Career Brief B-38, Cosmetologist. Open to the sections, "Personal Qualifications" and "Training Requirements". As you read it, listen to the side of the tape labeled "Personal Qualifications" and "Training Requirements".

When you have finished, go back and fill in the blanks of the following:

An aspirant should have an _____ and well-groomed _____, a pleasing _____, and a _____ manner.

She needs general _____ _____and strong _____ and _____. The work requires dexterity of _____ and _____.

Every state requires the Beauty Operator to be _____. Most states require applicants to pass a _____ _____.

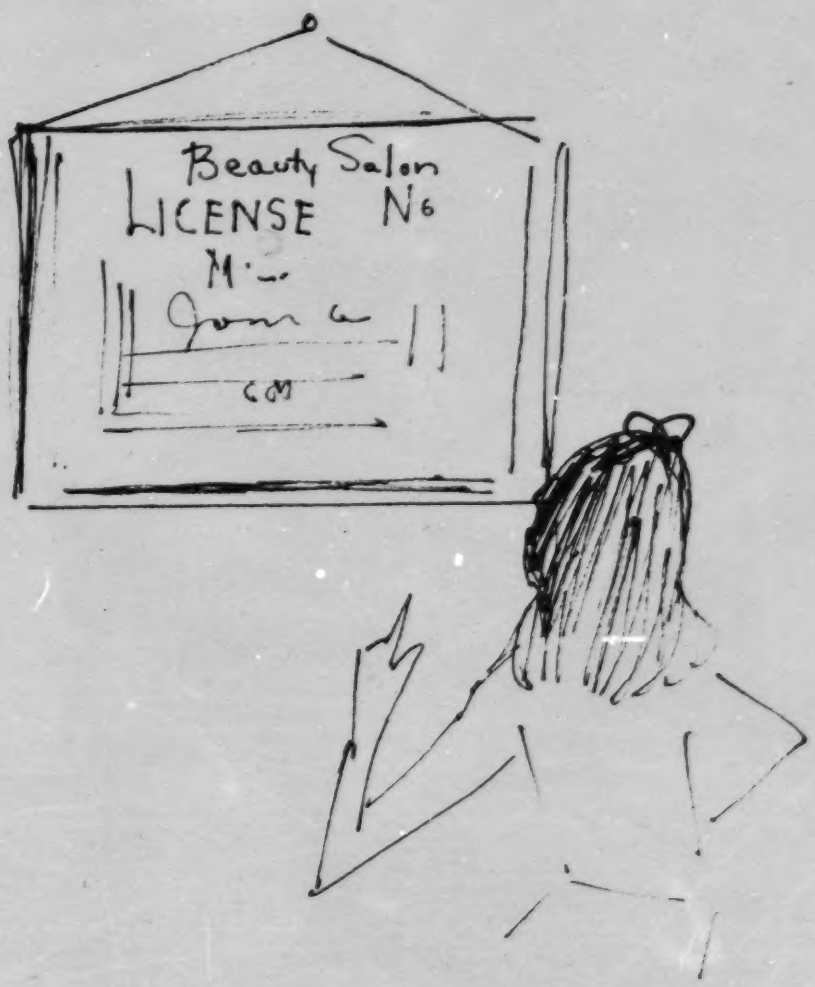
To take this examination, applicants must be at least _____ to _____ years old and complete an approved _____ course.

II. REQUIREMENTS
Learning Activity

The most desirable method of formal training includes completion of _____ _____ plus _____ to _____ months of formal training. A majority of beauty schools require applicants to have _____ _____ diplomas.

Some states will accept training in a public _____ _____ _____ leading to a vocational high school diploma as eligibility for taking the _____ _____ for a license.

The license is issued by New York State.



Get the D.O.T. Cartoon, Cosmetologist, A Beauty Operator.

Find the section that tells eight requirements for a Beauty Operator.

On the lines below, list 6 of these.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

All states require beauty operators to be licensed. Look up the meaning of the word license in the glossary. *Copy the meaning here:*

License: _____

_____

Make up a sentence using the word "license." *Write the sentence here:* _____

_____

_____

_____

The yellow pages in the telephone book list the beautv schools in Syracuse. *List the names of the schools here:*

_____

_____

_____

_____

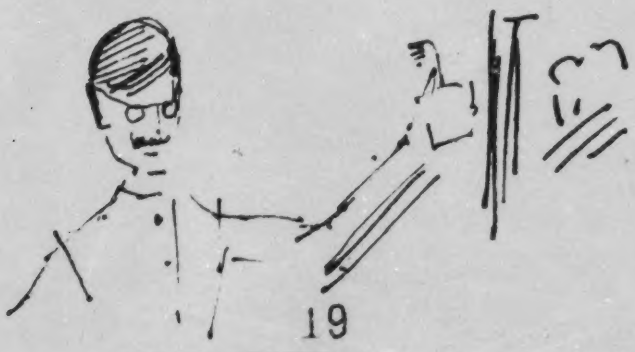
_____

_____

_____

_____

Ask your teacher to make arrangements with someone from the Cosmetology department of Central Tech to visit your class.



Beauty Operators...

As you read the following paragraph, *underline* the words that tell why the work is hard; *circle* the words that tell why the work is pleasant.

Beauty operators work in clean comfortable shops. Salons are well lighted and pleasant. The work is not dangerous, but it is hard.

Beauty operators work long hours, often in the evening. They must work standing up, but the job is fascinating and interesting.

The hair dresser may be very rushed on weekends. He or she must please all kinds of people.

Now, list the underlined words in column I; list the circled words in column II.

Reasons Why -

I	II
Beauty work is hard:	Beauty work is pleasant:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

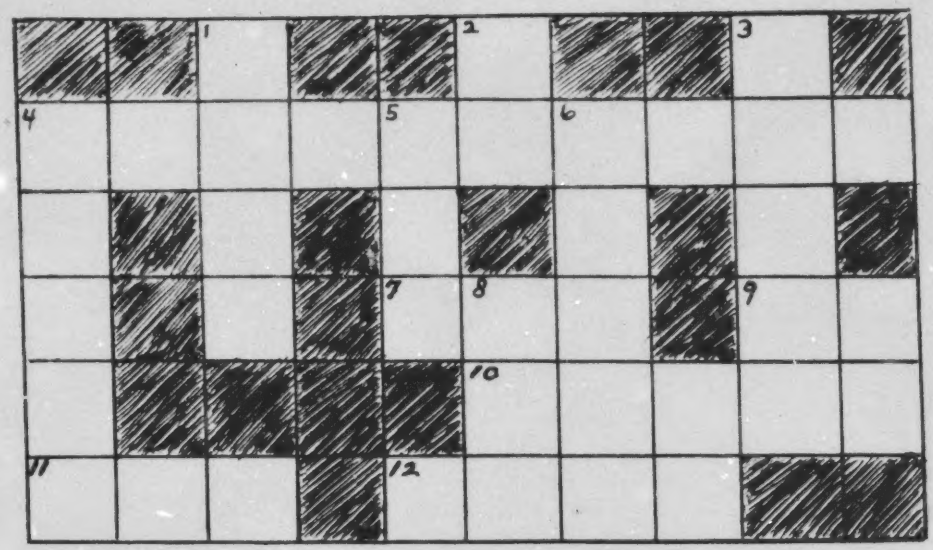
Get the SRA Brief, Beauticians and the tape with the same title. As you read the story, listen to the tape.

Get the DOT Cartoon, Beautician. Find the answers to fill the blanks below:

1. The pay is usually $_____ to $_____ per _____.
2. The hours are usually _____ to _____ a week.
3. _____ and _____ hours are usually included.
4. _____ _____ work is also available.

Extras you may get:

1. Paid _____
2. _____ holidays
3. _____ and _____ insurance.



ACROSS

4. Someone who cuts, curls, and styles hair
7. Another word for friend
8. Opposite of "off"
9. Pop _____
10. The air from a hairdryer is _____
11. Short for "permanent"

DOWN

1. What a beauty operator cuts and curls
2. Short for hello
3. Another name for a beauty shop
4. A tool used to groom hair
5. Money given to a beautician over and above normal fee
6. A beautician uses a dye to change the _____of hair
8. High card

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

COSMETOLOGY

Bibliography

SRA Brief

Beauticians

Career Brief

B-38 Cosmetologist

Career Summary

Manicurist

Job Guide

G-2 Manicurist

D.O.T. Cartoon

Cosmetologist, A Beauty Operator

State of New York, Dept. of State

Do You Plan to Be a Hairdresser?

Clairol

Careers in Beauty

Cassette Tapes

SRA - Beautician
Hairdresser (Career Center)

Glossary — Cosmetology

allergies - skin reactions to certain things; a person may have an "allergy" to creamy lotions, meaning they would cause their skin to break out or itch.

antiseptic - liquid or cream that helps kill germs and make things clean.

applicant - a person who applies for something, such as someone who is looking for a job.

aspirant - a person who hopes to reach a certain goal; someone who intends to become something in particular.

cosmetics - make-up; cream, powder, lipstick, etc.

cosmetology - the business of being a beauty operator.

customers - people who pay for services or buy things.

cuticles - hardened skin around the fingernails.

dexterity - being able to move quickly and easily.

emery board - a small, gentle nail file used to smooth edges of fingernails.

fascinating - holding the attention, interesting

hairdressing - the business of styling, cutting, curling and shampooing hair.

license - a certificate or paper issued to prove someone is qualified for some particular thing.

manicure - the care of the hands and nails.

manicurist - someone who is in the business of giving manicures.

payroll - the list of people who work in any one place and the amount of money they are to receive in wages.

receptionist - person who greets you when you enter a place of business.

salon - another word for shop, such as "beauty salon".

specialist - a person who is highly trained to do some particular thing.

ventilated - to have fresh air circulate through a room.

GUIDED OCCUPATIONAL ORIENTATION

STANDARD INTERVIEW SHEET

1. What is your name? _____

2. What is your job title? _____

3. How much education did you have to have for your job? _____

_____

4. Did you have to take a test for your job? _____

5. What are some of your duties? _____

_____

6. Do you mind telling what the starting salary for your job is?

_____

7. What is the top salary your job pays? _____

8. Is the salary the same for everyone on this type of job? _____

9. Who or what decides when you get a raise? _____

_____

10. Why did you choose this job? _____

_____

11. What do you like best about your job? _____

_____

12. What do you like least about your job? _____

_____

13. What are your working hours? _____

14. What good habits should I develop now in elementary school that would help me to become a successful worker when I grow up? _____

_____

_____

15. Are there school subjects that I must do especially well in if I were to work in this kind of job? _____

_____

_____

51

Beauty Care and Cosmetology

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District
409 West Genesee Street
Syracuse, N. Y. 13202

VT 102 204
Book 2 of 3

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

Cosmetology

Pre and Post Test

Choose the correct answer and write it in the blank.

1. A receptionist makes _____ for customers.

   shampoo | hairstyles | appointments

2. A colorist changes the color of the customers _____.

   hair | skin | fingernails

3. Pressing is done to _____.

   rubber gloves | curly hair | curly clothes

4. A manicurist grooms _____.

   hair | fingernails | scalp

5. To be a beauty operator you must be at least _____ years old.

   17 | 18 | 21

6. All beauty operators must have a _____.

   license | high school diploma | college diploma

7. A beauty operator's license comes from _____.

   New York State | beauty school | high school

8. One reason why a beautician's work is hard is that she must please _____.

   mainly her boss | all kinds of people | one customer at a time

9. The pay for a beautician is usually _____ a week.

   $60-70 | $80-100 | $100-120

10. _____ _____ is usually available for beauticians.

    a uniform | part-time work | early retirement

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

NAME _____ *SCHOOL* _____

PRE _____ *POST* _____ *TEACHER* _____

COSMETOLOGY - Yellow

Assigned	*Learning Activity*	*Done*	*Assigned*	*Enrichment*	*Done*
Nature of Work					
1.	Reading, listening to a tape, answering questions. pp. 1&2		1.	Visit a beauty shop. pg. 8	
2.	Answering questions, pictionary. pg. 3		2.	Plan a hair setting demonstration. pg. 9	
3.	Pictionary. pg. 3a				
4.	Reading, listening to tape. pg. 4				
5.	Worksheet, pg. 4a				
6.	Pictionary, listening to tape. pg. 5				
7.	Reading, answering questions. pg. 6				
8.	Reading, worksheet. pg. 7				
Requirements					
1.	Reading and worksheet. pp. 10&10a		1.	Listing beauty schools. pg. 12	
2.	Making out a license. pg. 11				
Conditions					
1.	Reading, listing reasons. pg. 13		1.	Reading, listening to tape. pg. 14	
2.	Reading, worksheet. pg. 13a				
Advantages					
1.	Reading, worksheet. pg. 15		1.	Crossword puzzle. pg. 16	
2.	Reading, worksheet. pg. 15a				

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

Did you know that hairdressing and related jobs hire 20,000 new people every year in the United States?

Have you ever thought you would like to work in a beauty salon (shop)?

To find out how to learn the trade - and how to succeed as a "beauty specialist".....read on!!

Table of Contents

Topic:	Page:
I. Nature of Work	
Learning Activity	1
Enrichment	8
II. Requirements	
Learning Activity	10
Enrichment	12
III. Conditions of Work	
Learning Activity	13
Enrichment	14
Iv. Advantages (Future of Job)	
Learning Activity	15
Enrichment	16
Bibliographies	
Interview Sheet	
Glossary	

1. Get the cassette tape on "Careers in the Beauty Industry".

Read the following story as you listen to the tape.

Have you ever been in a beauty salon or looked through the window of a beauty salon? Or, have you noticed women and girls walking by and have you thought that their hair looked real pretty? Do you know how many different kinds of jobs are needed to keep a beauty salon going so that those ladies can have nice-looking hair? Do you think you might like to work in the beauty industry? If you have, let's open the door and go in to see what makes a beauty salon tick.

SECTION 1

When we first enter the beauty salon, probably the first person we will meet is the RECEPTIONIST (ree-sept-shun-ist). She will have a desk with a telephone so that she can make appointments for customers and be sure they are taken good care of by the right hairdresser and on time!

The RECEPTIONIST also collects the money from the customers and usually takes care of selling COSMETICS which can be seen on shelves in the salon. The RECEPTIONIST usually keeps track of the hours the employees work, the amount of money they have earned and, sometimes, even makes up the payroll. The RECEPTIONIST may, in fact, be the salon owner or manager or she may be an employee. It can be an important and well-paid job.

TURN OFF THE TAPE RECORDER WHILE YOU ANSWER THE FOLLOWING QUESTIONS:

Duties of a receptionist:

1. A receptionist makes _____ for customers.
2. She makes sure they are _____ _____ _____ of by the right hairdresser...and on time!
3. The receptionist also _____ the _____ from the customers and usually takes care of selling _____.

4. The receptionist usually keeps track of the _____ the employees work, the amount of _____ they have earned, and sometimes even make up the _____.

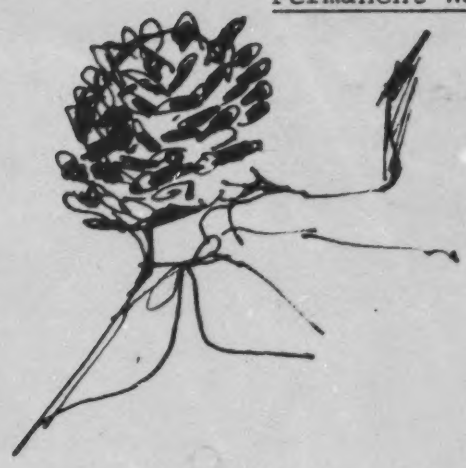
5. The receptionist may, in fact, be the _____ _____ or manager, or she may be an _____.

Pictionary --- about the Beauty Business!

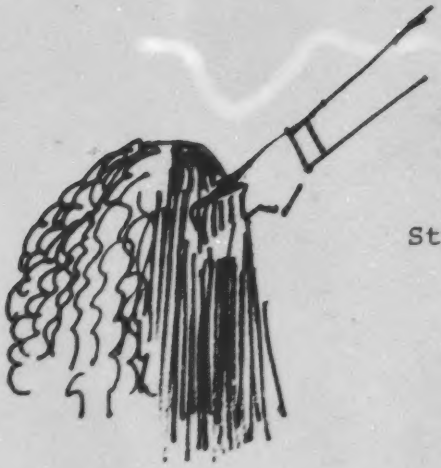
Shampooer - washes hair.

Hairstylist - cuts and styles hair.

Permanent Waver - puts curl in hair to stay in permanently.



Colorist - colors (dyes) hair.



Straightener - "presses" or takes curl out of hair.

NOW: turn the tape back on and listen to it as you read more about our visit to the beauty salon:

SECTION 2

As we get farther back into the salon, we will see men and women working on customers' hair. In large shops these men and women may be specialists - they ordinarily do only the job that you see them doing. SHAMPOOERS, they wash and clean the hair for different reasons; apply rinses either for dandruff or for a different color; and generally assist the HAIRSTYLIST who cuts and arranges the hair to make a lady look her best. We also see the COLORIST. She has on rubber gloves and a plastic apron and she is applying a thick, dark cream on the hair to make it the color that the STYLIST wants. At another chair a PERMANENT WAVER is rolling up hair on short, different-colored plastic curlers and then applying a liquid to the curls. The liquid doesn't smell too good, but it makes the hair pretty.

In still another chair another hairdresser wearing rubber gloves and a plastic apron is putting heavy, white cream on the hair. She is the STRAIGHTENING specialist. When hair is too curly or kinky for a certain style, curl must be taken out of the hair. Sometimes the STRAIGHTENER will use a hot, brass comb to take out the curl. This is called PRESSING.

Turn off the tape recorder.

Answer these questions from Section III

List two duties of a Shampooer

1. _____

2. _____

List one duty of a Hairstylist

1. _____

Complete the following sentences:

1. A Colorist wears _____ gloves and a _____ Apron. She applies thick, dark cream to the hair to change its _____.

List two steps a Permanent Waver goes through:

1. _____

_____

2. _____

_____

Complete the following sentences:

1. A Straightener puts heavy, white _____ on the hair.
2. Hair is straightened when it is too _____ or _____ for a certain style.
3. When a hot, brass comb is used to take out the curl, it is called _____.

Pictionary ---- about more beauty salon workers!

Manicurist - cleans, shapes, and polishes fingernails

Dispensary Clerk - hands out supplies

Chief Stylist - either the owner or manager

NOW: turn the tape back on and listen to it as you read about these workers.

Section III

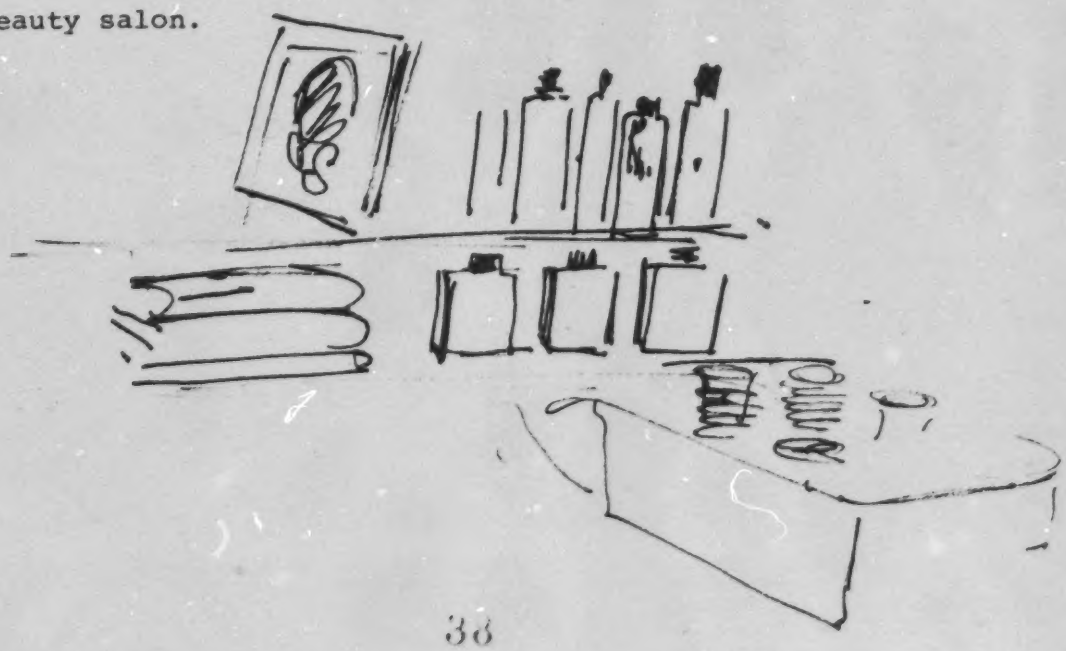
As we look over toward the dryers (dryers are hot-air hoods which fit over the customer's head to dry the hair - they look like space helmets), we see another person working on a customer's fingernails. She is called a MANICURIST and she clips and files fingernails, softens and grooms the customer's hands.

Back in the shop we discover a small room. It is well-lighted and ventilated. There is a sink and counter and lots of shelves, cabinets and containers all filled with bottles, cartons, linen and all sorts of things needed to work on customers and to keep the tools and containers clean. The person working in here is called a DISPENSARY CLERK.

We also have seen a man in a zipper jacket walking about the shop talking to different SPECIALISTS, looking at customer's hair and writing things on small cards. He is the OWNER or CHIEF STYLIST. What we have been looking at is a large shop with twenty or thirty people working in it. In a small shop (three or four people) the same type of things will be going on except there will be no specialists. The people working in a small shop perform all of these operations and are called ALL-AROUND OPERATORS.

Answer these questions from Section III

1. Dryers are _____ _____ hoods which fit over the customer's head to _____ the hair.
2. A manicurist _____ and files fingernails, _____ and _____ the customer's hands.
3. A _____ _____ handles and gives out bottles, linen and all other supplies used in the beauty salon.



Get the Job Guide G-2, Manicurist.

Read the section on Job Duties. List six steps the manicurist goes through to "do" fingernails.

1. _____

_____

2. _____

_____

3. _____

_____

4. _____

_____

5. _____

_____

6. _____

_____

This job guide also states three things a manicurist MAY do.

They are:

1. _____

2. _____

3. _____

How To Collect Information About The Hairdressing Profession

1. Get the name and address of any company that makes materials used in beauty shops. Use the list provided here or visit a beauty shop and tell the owner or manager that you want to be a hairdresser and ask if he can provide you with even more information.

2. How do you get to talk to a shop owner? Simple! First, find out the owner's name. The easiest way is to call on the telephone and ask. Just say, "May I have the name of the owner of your beauty shop?" (be sure that you have paper and pencil ready to write it down). Then say, "Thank you." During the first part of the week, stop into the shop and say "Hello, my name is _____ and I would like to see Mr. _____." When the owner comes, just look him straight in the eye and tell him that you want to be a hairdresser and you would like advice on getting started. When you and he are through talking, thank him for his help. If it happens that he doesn't want to help, don't be discouraged. You can figure that you have met one of the very few unpleasant people in the beauty business. Call someone else (all jobs have some unpleasant people).

With a partner from your class, practice setting hair from the chart in the brown folder. Ask your teacher if you may plan a demonstration for your class.

New York State Rules

To Become A Beauty Operator You Must Meet The Following Requirements"

1. You must be 17 years of age or older.
2. You must successfully have completed an approved course of study such as is offered at Syracuse Central Technical High School or as is offered in a private trade school.
3. You must be of good moral character.
4. You must be in good health.
5. You must have at least finished an elementary school education.

Get the Career Brief B-38, Cosmetologist. Open to the sections, "Personal Qualifications" and "Training Requirements". As you read it, listen to the side of the tape labeled "Personal Qualifications" and "Training Requirements".

When you have finished, go back and fill in the blanks of the following:

An aspirant should have an _____ and well-groomed _____, a pleasing _____, and a _____ manner.

She needs general _____ _____and strong _____ and _____. The work requires dexterity of _____ and _____.

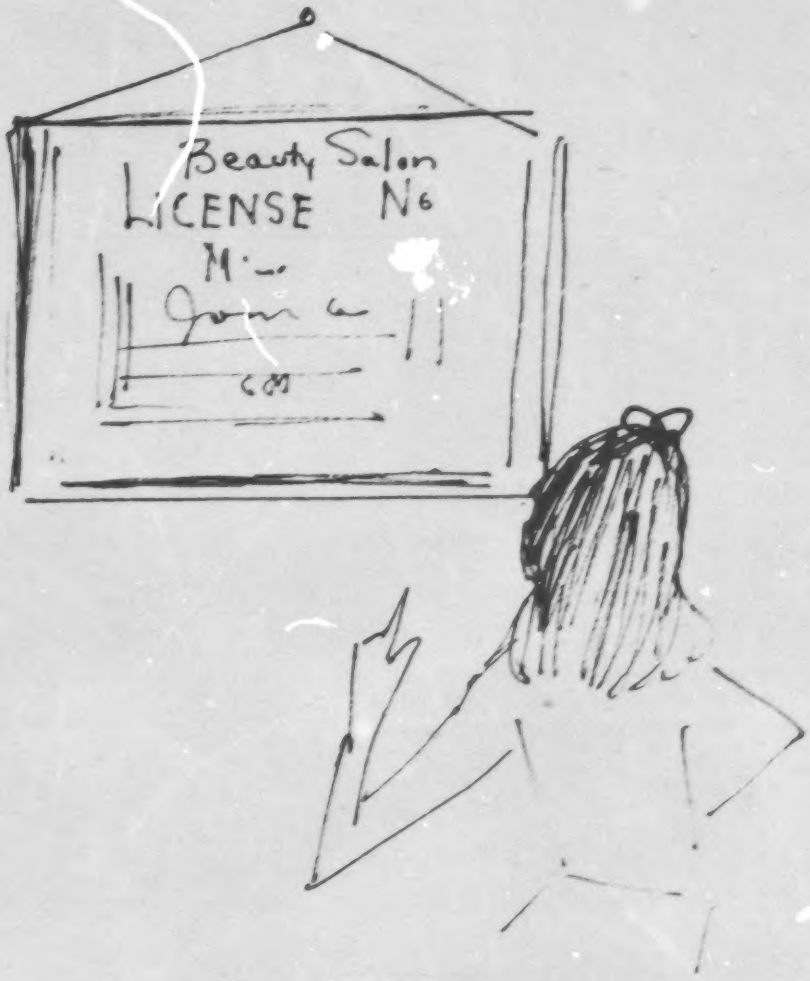
Every state requires the Beauty Operator to be _____. Most states require applicants to pass a _____ _____.

To take this examination, applicants must be at least _____ to _____ years old and complete an approved _____ course.

The most desirable method of formal training includes completion of _____ _____ plus _____ to _____ months of formal training. A majority of beauty schools require applicants to have _____ _____ diplomas.

Some states will accept training in a public _____ _____ _____ leading to a vocational high school diploma as eligibility for taking the _____ _____ for a license.

The license is issued by New York State.



All states require that Beauty Operators be licensed. To get a license, you must (1) first attend a beauty school or complete the course in Cosmetology at Central Tech High School. (2) You must be 17 years old or older. (3) You must have finished elementary school. (4) You must pass an examination.

Now fill in the four things necessary to obtain this license.

State of New York

LICENSE FOR BEAUTY OPERATOR

(1) _____

_____

(2) _____

_____

(3) _____

_____

(4) _____

_____

The yellow pages in the telephone book list the beautv schools in Syracuse. *List the names of the schools here:*

_____

_____

_____

_____

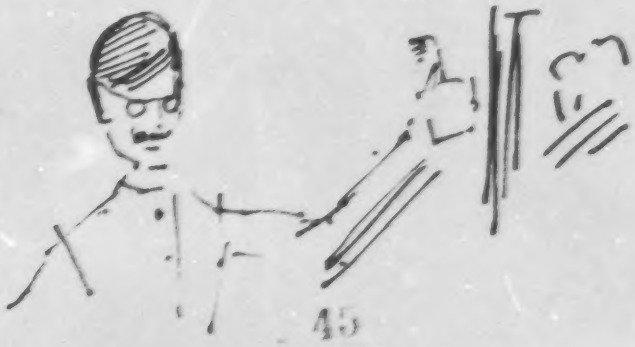
_____

_____

_____

_____

Ask your teacher to make arrangements with someone from the Cosmetology department of Central Tech to visit your class.



Beauty Operators...

As you read the following paragraph, *underline* the words that tell why the work is hard; *circle* the words that tell why the work is pleasant.

Beauty operators work in clean comfortable shops. Salons are well lighted and pleasant. The work is not dangerous, but it is hard.

Beauty operators work long hours, often in the evening. They must work standing up, but the job is fascinating and interesting.

The hair dresser may be very rushed on weekends. He or she must please all kinds of people.

Now, list the underlined words in column I; list the circled words in column II.

Reasons Why -

I Beauty work is hard:	II Beauty work is pleasant:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Get the SRA brief, Beautician. On the last page, copy the section "Where Jobs Are Found".

_____

_____

_____

_____

In the section "Getting Started," find the places where jobs can be obtained. *List them here:*

1. _____
2. _____
3. _____
4. _____

Get the SRA Brief, Beauticians and the tape with the same title.

As you read the story, listen to the tape.

Get the DOT Cartoon, Beautician. Find the answers to fill the blanks below:

1. The pay is usually $_____ to $_____ per _____.
2. The hours are usually _____ to _____ a week.
3. _____ and _____ hours are usually included.
4. _____ _____ work is also available.

Extras you may get:

1. Paid _____
2. _____ holidays
3. _____ and _____ insurance.

IV. ADVANTAGES
Learning Activity

Find the SRA Brief, Beautician, On the last page, in the section "Earnings", read to find the answers to these questions. Write in the missing parts.

1. The practice in most shops is to offer a flat guaranteed _____ _____ plus a _____ of the fees she takes in.
2. As an operator becomes _____, her wages increase.
3. The beginning wage in large shops is about $_____ to $_____ per week.
4. _____ add to the income.

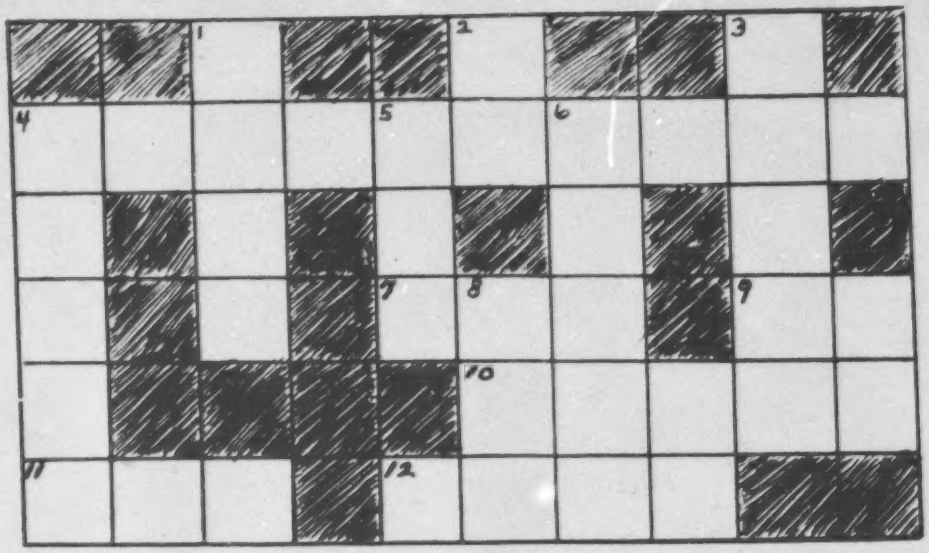
Find the section "Future". Copy the sentence here: _____

_____

_____

_____

(15a)



ACROSS

4. Someone who cuts, curls, and styles hair
7. Another word for friend
8. Opposite of "off"
9. Pop _____
10. The air from a hairdryer is _____
11. Short for "permanent"

DOWN

1. What a beauty operator cuts and curls
2. Short for hello
3. Another name for a beauty shop
4. A tool used to groom hair
5. Money given to a beautician over and above normal fee
6. A beautician uses a dye to change the _____of hair
8. High card

COSMETOLOGY

Bibliography

SRA Brief

Beauticians

Career Brief

B-38 Cosmetologist

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G-2 Manicurist

D.O.T. Cartoon

Cosmetologist, A Beauty Operator

State of New York, Dept. of State

Do You Plan to Be a Hairdresser?

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Cassette Tapes

SRA - Beautician
Hairdresser (Career Center)

Glossary — Cosmetology

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customers - people who pay for services or buy things.

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dexterity - being able to move quickly and easily.

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fascinating - holding the attention, interesting

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manicure - the care of the hands and nails.

manicurist - someone who is in the business of giving manicures.

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salon - another word for shop, such as "beauty salon".

specialist - a person who is highly trained to do some particular thing.

ventilated - to have fresh air circulate through a room.

GUIDED OCCUPATIONAL ORIENTATION

STANDARD INTERVIEW SHEET

1. What is your name? _____

2. What is your job title? _____

3. How much education did you have to have for your job? _____

_____

4. Did you have to take a test for your job? _____

5. What are some of your duties? _____

_____

6. Do you mind telling what the starting salary for your job is?

_____

7. What is the top salary your job pays? _____

8. Is the salary the same for everyone on this type of job? _____

9. Who or what decides when you get a raise? _____

_____

10. Why did you choose this job? _____

_____

11. What do you like best about your job? _____

_____

12. What do you like least about your job? _____

_____

13. What are your working hours? _____

14. What good habits should I develop now in elementary school that would help me to become a successful worker when I grow up? _____

_____

_____

15. Are there school subjects that I must do especially well in if I were to work in this kind of job? _____

_____

_____

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Beauty Care and Cosmetology

VT 102-204
Book 3 of 3

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

Cosmetology

Pre and Post Test

Choose the correct answer and write it in the blank.

1. A receptionist makes _____ for customers.

   shampoo | hairstyles | appointments

2. A colorist changes the color of the customers _____.

   hair | skin | fingernails

3. Pressing is done to _____.

   rubber gloves | curly hair | curly clothes

4. A manicurist grooms _____.

   hair | fingernails | scalp

5. To be a beauty operator you must be at least _____ years old.

   17 | 18 | 21

6. All beauty operators must have a _____.

   license | high school diploma | college diploma

7. A beauty operator's license comes from _____.

   New York State | beauty school | high school

8. One reason why a beautician's work is hard is that she must please _____.

   mainly her boss | all kinds of people | one customer at a time

9. The pay for a beautician is usually _____ a week.

   $60-70 | $80-100 | $100-120

10. _____ _____ is usually available for beauticians.

    a uniform | part-time work | early retirement

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

NAME _____ SCHOOL _____

PRE _____ POST _____ TEACHER _____

COSMETOLOGY - Pink

Assigned	Learning Activity	Done	Assigned	Enrichment	Done
Nature of Work					
1.	Reading, listening to a tape, answering questions. pp. 1&2		1.	Visit a beauty shop. pg. 8	
2.	Answering questions, pictionary. pg. 3		2.	Write a letter. pg. 8a	
3.	Pictionary. pg. 3a		3.	Plan a hair setting demonstration. pg. 9	
4.	Reading, listening to tape. pg. 4				
5.	Worksheet. pg. 4a				
6.	Pictionary, listening to tape. pg. 5				
7.	Reading, answering questions. pg. 6				
8.	Reading, worksheet. pg. 7				
Requirements					
1.	Reading and worksheet. pp. 10&10a		1.	Write a paragraph. pg. 11a	
2.	Reading, worksheet. pg. 11		2.	Listing beauty schools. pg. 12	
Conditions					
1.	Reading, listing reasons. pg. 13		1.	Reading, listening to tape. pg. 14	
2.	Reading, worksheet. pg. 13a				
Advantages					
1.	Reading, worksheet. pg. 15		1.	Crossword puzzle. pg. 16	
2.	Reading, worksheet. pg. 15a		2.	Unscrambling sentences. pg. 17	

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

Did you know that hairdressing and related jobs hire 20,000 new people every year in the United States?

Have you ever thought you would like to work in a beauty salon (shop)?

To find out how to learn the trade - and how to succeed as a "beauty specialist".....read on!!

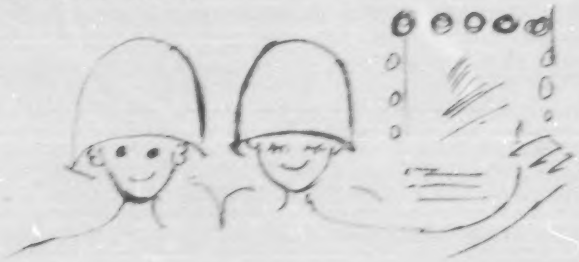

Table of Contents

Topic:	Page:
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Learning Activity	1
Enrichment	8
II. Requirements	
Learning Activity	10
Enrichment	12
III. Conditions of Work	
Learning Activity	13
Enrichment	14
Iv. Advantages (Future of Job)	
Learning Activity	15
Enrichment	16
Bibliographies	
Interview Sheet	
Glossary	

1. Get the cassette tape on "Careers in the Beauty Industry".

Read the following story as you listen to the tape.

Have you ever been in a beauty salon or looked through the window of a beauty salon? Or, have you noticed women and girls walking by and have you thought that their hair looked real pretty? Do you know how many different kinds of jobs are needed to keep a beauty salon going so that those ladies can have nice-looking hair? Do you think you might like to work in the beauty industry? If you have, let's open the door and go in to see what makes a beauty salon tick.

SECTION 1

When we first enter the beauty salon, probably the first person we will meet is the RECEPTIONIST (ree-sept-shun-ist). She will have a desk with a telephone so that she can make appointments for customers and be sure they are taken good care of by the right hairdresser and on time!

The RECEPTIONIST also collects the money from the customers and usually takes care of selling COSMETICS which can be seen on shelves in the salon. The RECEPTIONIST usually keeps track of the hours the employees work, the amount of money they have earned and, sometimes, even makes up the payroll. The RECEPTIONIST may, in fact, be the salon owner or manager or she may be an employee. It can be an important and well-paid job.

TURN OFF THE TAPE RECORDER WHILE YOU ANSWER THE FOLLOWING QUESTIONS:

Duties of a receptionist:

1. A receptionist makes _____ for customers.
2. She makes sure they are _____ _____ _____ of by the right hairdresser...and on time!
3. The receptionist also _____ the _____ from the customers and usually takes care of selling _____.

4. The receptionist usually keeps track of the _____ the employees work, the amount of _____ they have earned, and sometimes even make up the _____.

5. The receptionist may, in fact, be the _____ _____ or manager, or she may be an _____.

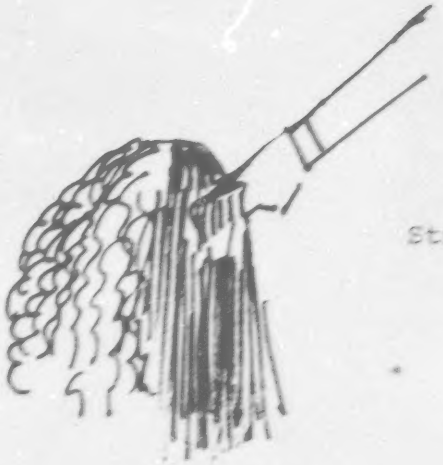
Pictionary --- about the Beauty Business!

Shampooer - washes hair.

Hairstylist - cuts and styles hair

Permanent Waver - puts curl in hair to stay in permanently.

Colorist - colors (dyes) hair.



Straightener - "presses" or takes curl out of hair.

NOW: turn the tape back on and listen to it as you read more about our visit to the beauty salon:

SECTION 2

As we get farther back into the salon, we will see men and women working on customers' hair. In large shops these men and women may be specialists - they ordinarily do only the job that you see them doing. SHAMPOOERS, they wash and clean the hair for different reasons; apply rinses either for dandruff or for a different color; and generally assist the HAIRSTYLIST who cuts and arranges the hair to make a lady look her best. We also see the COLORIST. She has on rubber gloves and a plastic apron and she is applying a thick, dark cream on the hair to make it the color that the STYLIST wants. At another chair a PERMANENT WAVER is rolling up hair on short, different-colored plastic curlers and then applying a liquid to the curls. The liquid doesn't smell too good, but it makes the hair pretty.

In still another chair another hairdresser wearing rubber gloves and a plastic apron is putting heavy, white cream on the hair. She is the STRAIGHTENING specialist. When hair is too curly or kinky for a certain style, curl must be taken out of the hair. Sometimes the STRAIGHTENER will use a hot, brass comb to take out the curl. This is called PRESSING.

Turn off the tape recorder.

Answer these questions from Section III

List two duties of a Shampooer

1. _____

2. _____

List one duty of a Hairstylist

1. _____

Complete the following sentences:

1. A Colorist wears _____ gloves and a _____ Apron. She applies thick, dark cream to the hair to change its _____.

List two steps a Permanent Waver goes through:

1. _____

_____ _____

2. _____

_____

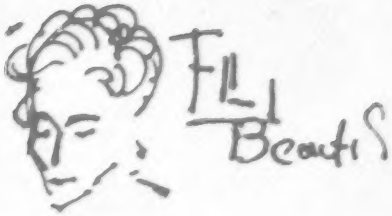
Complete the following sentences:

1. A Straightener puts heavy, white _____ on the hair.
2. Hair is straightened when it is too _____ or _____ for a certain style.
3. When a hot, brass comb is used to take out the curl, it is called _____.

Pictionary ---- about more beauty salon workers!

Manicurist - cleans, shapes, and polishes fingernails

Dispensary Clerk - hands out supplies



Chief Stylist - either the owner or manager

NOW: turn the tape back on and listen to it as you read about these workers.

Section III

As we look over toward the dryers (dryers are hot-air hoods which fit over the customer's head to dry the hair - they look like space helmets), we see another person working on a customer's fingernails. She is called a MANICURIST and she clips and files fingernails, softens and grooms the customer's hands.

Back in the shop we discover a small room. It is well-lighted and ventilated. There is a sink and counter and lots of shelves, cabinets and containers all filled with bottles, cartons, linen and all sorts of things needed to work on customers and to keep the tools and containers clean. The person working in here is called a DISPENSARY CLERK.

We also have seen a man in a zipper jacket walking about the shop talking to different SPECIALISTS, looking at customer's hair and writing things on small cards. He is the OWNER or CHIEF STYLIST. What we have been looking at is a large shop with twenty or thirty people working in it. In a small shop (three or four people) the same type of things will be going on except there will be no specialists. The people working in a small shop perform all of these operations and are called ALL-AROUND OPERATORS.

Answer these questions from Section III

1. Dryers are _____ _____ hoods which fit over the customer's head to _____ the hair.
2. A manicurist _____ and files fingernails, _____ and _____ the customer's hands.
3. A _____ _____ handles and gives out bottles, linen and all other supplies used in the beauty salon.

Get the Career Summary: Manicurist

Read the section on "Duties", and answer the following:

1. Where does a manicurist work?

   _____

2. What are the three main jobs she does to a customer's fingernails?

   (1) _____

   (2) _____

   (3) _____

3. What is used to remove old polish? _____

   _____

4. What is used to shape and smooth the end of the nails?

   _____

5. What kind of water is used to clean fingernails?

   _____

6. What is used to soften nail cuticles? _____

7. What two things are used to polish the nails? _____

   _____

8. What is used to apply liquid polish? _____

9. What does the manicurist do with the instruments after each manicure? _____

10. Who may do the manicuring?

    _____ or _____

How To Collect Information About The Hairdressing Profession

1. Get the name and address of any company that makes materials used in beauty shops. Use the list provided here or visit a beauty shop and tell the owner or manager that you want to be a hairdresser and ask if he can provide you with even more information.

2. How do you get to talk to a shop owner? Simple! First, find out the owner's name. The easiest way is to call on the telephone and ask. Just say, "May I have the name of the owner of your beauty shop?" (be sure that you have paper and pencil ready to write it down). Then say, "Thank you." During the first part of the week, stop into the shop and say "Hello, my name is _____ and I would like to see Mr. _____." When the owner comes, just look him straight in the eye and tell him that you want to be a hairdresser and you would like advice on getting started. When you and he are through talking, thank him for his help. If it happens that he doesn't want to help, don't be discouraged. You can figure that you have met one of the very few unpleasant people in the beauty business. Call someone else (all jobs have some unpleasant people).

3. How to write for information: Use the list of companies below or from labels or ads and follow the form below.

Your street address
Syracuse, New York ZIP
Date

Dear Sir,

I am still in school but I want to be a hairdresser. When I am ready to go to work, would you be kind enough to advise me on getting started?

Thank you.

Sincerely,
Your name

With a partner from your class, practice setting hair from the chart in the brown folder. Ask your teacher if you may plan a demonstration for your class.

New York State Rules

To Become A Beauty Operator You Must Meet The Following Requirements"

1. You must be 17 years of age or older.
2. You must successfully have completed an approved course of study such as is offered at Syracuse Central Technical High School or as is offered in a private trade school.
3. You must be of good moral character.
4. You must be in good health.
5. You must have at least finished an elementary school education.

Get the Career Brief B-38, Cosmetologist. Open to the sections, "Personal Qualifications" and "Training Requirements". As you read it, listen to the side of the tape labeled "Personal Qualifications" and "Training Requirements".

When you have finished, go back and fill in the blanks of the following:

An aspirant should have an _____ and well-groomed _____, a pleasing _____, and a _____ manner.

She needs general _____ _____ and strong _____ and _____. The work requires dexterity of _____ and _____.

Every state requires the Beauty Operator to be _____. Most states require applicants to pass a _____ _____.

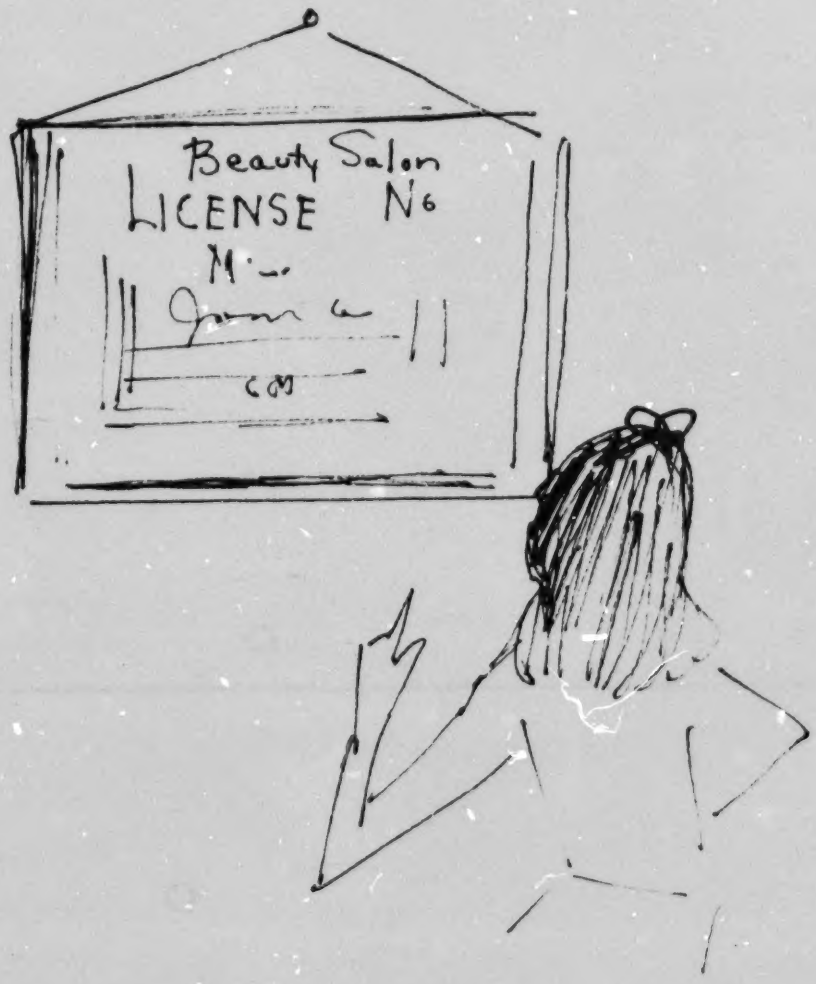
To take this examination, applicants must be at least _____ to _____ years old and complete an approved _____ course.

II. REQUIREMENTS
Learning Activity

The most desirable method of formal training includes completion of _____ _____ plus _____ to _____ months of formal training. A majority of beauty schools require applicants to have _____ _____ diplomas.

Some states will accept training in a public _____ _____ _____ leading to a vocational high school diploma as eligibility for taking the _____ _____ for a license.

The license is issued by New York State.



II. REQUIREMENTS
Learning Activity

Get the blue pamphlet entitled "Do You Plan to Be a Hairdresser?"

Answer the following:

Who May Be a Licensed Hairdresser?

1. How old must an applicant be? _____

2. What kind of school must he complete a course in? _____

_____

3. Under New York law, a licensed hairdresser must know how to do several things to hair.

   List 8 different things:

   1. _____ 2. _____ 3. _____ 4. _____

   5. _____ 6. _____ 7. _____ 8. _____

In the folder, Careers in Beauty, read section #3, "Are you Qualified?" and #4 "Training for a Career in Beauty." Write a short paragraph telling why - or why not - you feel you would be suited to this career.

_____

_____

_____

_____

_____

The yellow pages in the telephone book list the beauty schools in Syracuse. *List the names of the schools here:*

_____

_____

_____

_____

_____

_____

_____

_____

Ask your teacher to make arrangements with someone from the Cosmetology department of Central Tech to visit your class.

Beauty Operators...

As you read the following paragraph, *underline* the words that tell why the work is hard; *circle* the words that tell why the work is pleasant.

Beauty operators work in clean comfortable shops. Salons are well lighted and pleasant. The work is not dangerous, but it is hard.

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Reasons Why -

I	II
Beauty work is hard:	Beauty work is pleasant:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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_____

_____

_____

_____

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1. _____
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3. _____
4. _____

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As you read the story, listen to the tape.

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Learning Activity

Get the DOT Cartoon, Beautician. Find the answers to fill the blanks below:

1. The pay is usually $_____ to $_____ per _____.
2. The hours are usually _____ to _____ a week.
3. _____ and _____ hours are usually included.
4. _____ _____ work is also available.

Extras you may get:

1. Paid _____
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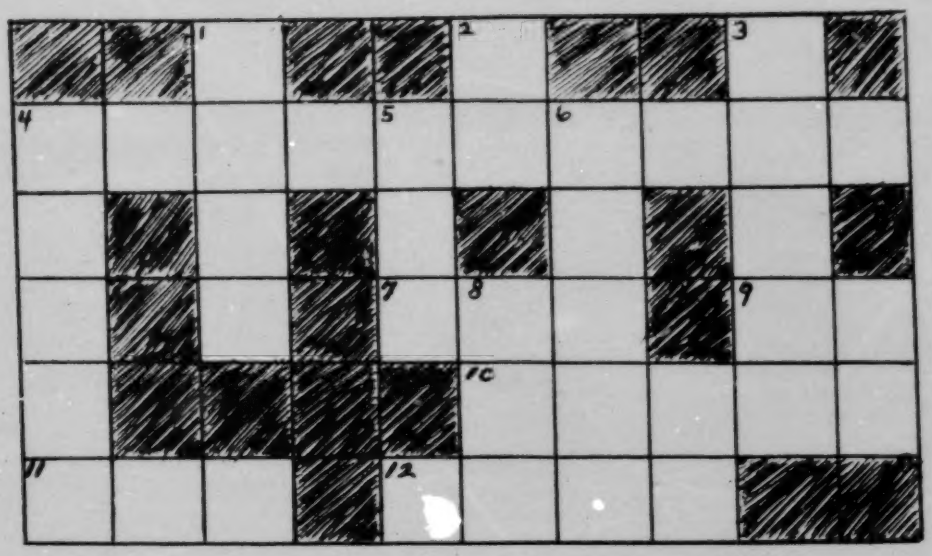

ACROSS

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7. Another word for friend
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9. Pop _____
10. The air from a hairdryer is _____
11. Short for "permanent"

DOWN

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2. Short for hello
3. Another name for a beauty shop
4. A tool used to groom hair
5. Money given to a beautician over and above normal fee
6. A beautician uses a dye to change the _____of hair
8. High card

Finish these sentences by unscrambling the words.

1. The beauty industry is:

   for market part-time excellent an workers.

   _____

   _____

2. The beauty industry is:

   is growing there big operators and for a demand continually.

   _____

   _____

3. To become a beauty operator:

   short relatively the is training.

   _____

   _____

GUIDED OCCUPATIONAL ORIENTATION
Syracuse City School District

COSMETOLOGY

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salon - another word for shop, such as "beauty salon".

specialist - a person who is highly trained to do some particular thing.

ventilated - to have fresh air circulate through a room.

GUIDED OCCUPATIONAL ORIENTATION

STANDARD INTERVIEW SHEET

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2. What is your job title? _____

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_____

4. Did you have to take a test for your job? _____

5. What are some of your duties? _____

_____

6. Do you mind telling what the starting salary for your job is?

_____

7. What is the top salary your job pays? _____

8. Is the salary the same for everyone on this type of job? _____

9. Who or what decides when you get a raise? _____

_____

10. Why did you choose this job? _____

_____

11. What do you like best about your job? _____

_____

12. What do you like least about your job? _____

_____

13. What are your working hours? _____

14. What good habits should I develop now in elementary school that would help me to become a successful worker when I grow up? _____

_____

_____

15. Are there school subjects that I must do especially well in if I were to work in this kind of job? _____

_____

_____

ACCESSION NUMBER: VT102208

PUBLICATION DATE: JUN71

TITLE: THE CAMDEN HIGH SCHOOL VOCATIONAL INTERDISCIPLINARY PROGRAM.

DESCRIPTOR: *GRADE 11; *INTERDISCIPLINARY APPROACH; *TRADE AND INDUSTRIAL EDUCATION; *CURRICULUM GUIDES; HIGH SCHOOLS; *MACHINE TOOLS; TEACHING GUIDES; MECHANICS (PROCESS)

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 155P.; RELATED DOCUMENTS VT 102 208 THROUGH VT 102 210 IN THIS ISSUE.

ABSTRACT: THIS DOCUMENT PRESENTS MATERIAL TO BE USED IN A MACHINE TECHNOLOGY PROGRAM AT THE GRADE 11 LEVEL. INTENDED AS AN INTERDISCIPLINARY APPROACH, THIS COURSE IS ORGANIZED BY THE FOUR AREAS OF LABORATORY, SCIENCE, MATHEMATICS, AND COMMUNICATIONS FOR EACH SUBSTANTIVE AREA. THE FIRST PART OF THE DOCUMENT GIVES INFORMATION INCLUDING OBJECTIVES AND PRETESTS AND POSTTESTS FOR EACH OF THE NINE UNITS PLUS AN ORIENTATION. THE SECOND PART OF THE DOCUMENT PRESENTS ORIENTATION MATERIAL FOR THE NINE UNITS OF MACHINE TECHNOLOGY, MEASUREMENT, INTERPRETATION OF DRAWINGS AND SYMBOLS, DRILLING, LATHES, MILLING MACHINE, SAWS, THE SHAPER, AND CHARACTERISTICS OF METALS. (LJ)

CONTRACT NUMBER: OEC-0-70-5190(361)

INSTITUTION NAME: CAMDEN HIGH SCHOOL, S.C.

SPONSORING AGENCY NAME: BUREAU OF ADULT, VOCATIONAL, AND TECHNICAL EDUCATION (DHEW/OE), WASHINGTON, D.C. DIV. OF VOCATIONAL AND TECHNICAL EDUCATION.

VT 102 208

CAMDEN HIGH SCH

VOCATIONAL INTERDISCIPLI

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BAVTE/DV
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June, 1971

VT 102 208

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EN HIGH SCHOOL

NTERDISCIPLINARY PROGRAM

Demonstration Programs
of
Vocational Education
in
South Carolina Region V
BAVTE/DVTE Project No. 0-361-0006
Contract No. OEC-0-70-5190(361)

The Camden High School

Vocational Interdisciplinary Program

11th Grade

Team Members:

Samuel Eisenback	- Machine Technology
Rawson Calvin Hipp	- Mathematics
Betty C. Webber	- English
Vivian Bracey Metze	- Science

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A Proposal of Camden High School's

Vocational Interdisciplinary Program of Stud

OVERALL PROGRAM OBJECTIVES:

1. To improve academic achievement.
2. To help students see the relevance of academic subjects to vocational courses a
3. To prepare students for post high school training (either college or technical employment.
4. To motivate students to enter skill training programs.
5. To help reduce the drop-out rate.
6. To help remove the stigma usually connected with vocational subjects.
7. To help students see the value of teamwork and to assist those with leadership abilities.

A Proposal of Camden High School's

cational Interdisciplinary Program of Study

academic subjects to vocational courses and to their later lives.

ool training (either college or technical school) or for gainful

training programs.

nected with vocational subjects.

mwork and to assist those with leadership potential to realize their

ORIENTATION

ORIENTATION

1

LABORATORY	
ORIENTATION	ORIENTATION
OBJECTIVES: MACHINE TECHNOLOGY 1. To organize class that tools will be replaced, machine clean and floor sweep, in an orderly way. 2. That each student will wear safety clothing in shop such as short sleeves, long pants with shirt tails in and socks worn with shoes. 3. Introduce students to each machine in shop demonstrating how each works.	OBJECTIVES: SCIENC 1. To demon and show changed. 2. To make scales a forces t 3. To calcu simple m 4. To calcu simple m 5. To recor cline pl planes o 1'x5', 1 6. To recor pulley i 7. To write

	SCIENCE
	ORIENTATION
l be replaced, n an orderly ty clothing ong pants rn with shoes. ne in shop	OBJECTIVES: SCIENCE 1. To demonstrate the use of each simple machine and show how speed, direction, and force are changed. 2. To make graphs plotting vectors of convient scales applying the law of moment and parallel forces to all kinds of levers. 3. To calculate and demonstrate the work done by simple machines. 4. To calculate the mechanical advantages of simple machines used in industry and in the home. 5. To record and calculate the work done with incline planes by sliding a wooden block on the planes of the following dimensions: 1'x3", 1'x5', 1'x2", and 1'x1½'. 6. To record and calculate the efficiency of a pulley in lifting weight in pounds and in grams. 7. To write up scientific reports as outlined by

MATHEMATICS	C O
ORIENTATION	ORIENTATION
OBJECTIVES: MACHINE TECHNOLOGY	OBJECTIVES: MACHINE TE
1. Class organization.	1. 9 out of 10 correctly al
2. General outline of course.	2. 8 out of 10 the main ide paragraphs.
3. Simple machines and their formula.	3. 10 out of 10 different ty
3.1 The lever.	4. 7 out of 10 and follow o
3.2 The inclined plane.	
3.3 The wheel and axle.	
3.4 The pulley.	
3.5 The wedge.	
3.6 The screw.	

C O M M U N I C A T I O N S

ORIENTATION

OBJECTIVES: MACHINE TECHNOLOGY

1. 9 out of 10 students will be able to spell correctly all the words in the list given.
2. 8 out of 10 students will be able to read for the main idea in a paragraph or group of paragraphs.
3. 10 out of 10 students will be able to use different types of reference materials.
4. 7 out of 10 students will be able to give and follow oral and written directions.

LABORATORY	
	scienti
	OUTLINE OF CONTEN
	A. Class o
	1. Pro lab
	2. Obs
	3. For
	B. Introdu
	1. Lev
	2. Pul
	3. Whe
	4. Inc
	5. Scr
	6. Wed
	C. Applica
	1. Lev
	2. Pul
	D. Mechani
	1. Inp

scientific format.

OUTLINE OF CONTENT

A. Class organization

1. Procedures and used of basic tools in laboratory.
2. Observation of safety precautions.
3. Format of Laboratory report.

B. Introduction and use of simple machine

1. Lever
2. Pulley
3. Wheel and Axle
4. Incline Plane
5. Screw
6. Wedge

C. Applications of simple machine

1. Lever
2. Pulley

D. Mechanical advantage

1. Input and Output of machines

scientific format.

OUTLINE OF CONTENT

A. Class organization

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6. Wedge

C. Applications of simple machine

1. Lever
2. Pulley

D. Mechanical advantage

1. Input and Output of machines

MATHEMATICS	CO

COMMUNICATIONS

5

LABORATORY

PRE AND POST TEST

1. Name that the tool crib keeper is to do at end of period.
2. Who is responsible to clean off the machine that you work on during period.?
3. How many days do the sweepers sweep before some one else replaces them?
4. Who sweeps when one of the assigned sweepers is absent?

2. Wh

E. Frictio

1. Sli

2. Rol

F. Force

1. Gra

2. Vec

3. Co

4. Par

5. Law

PRE AND POST TEST

1. What ar can do?

2. Write t ing mac

a. a b

b. an

c. an

d. a p

e. rak

2. What is efficiency?

E. Frictional forces

1. Sliding

2. Rolling

F. Force

1. Gravitational

2. Vector Quantity

3. Constructing force diagrams

4. Parallel forces

5. Law of Moments

PRE AND POST TEST

1. What are five fundamental things that machines can do?

2. Write the fundamental use for each of the following machines.

a. a bicycle

b. an electric generator

c. an automobile jack

d. a pulley on a flag pole

e. rake handle

s to do

the machine

eep before

ned sweepers

MATHEMATICS

PRE AND POST TEST

1. Sketch and give an example of each of the three classes of levers.

2. (a) What is the mechanical advantage of a combination of pulleys that lifts a 600 lb. box when an effort of 150 lb. is applied?

(b) If the box rises 5 feet when the effort pulls in 30 feet of rope, what is the work input?

(c) What is the work output?

(d) What is the efficiency?

PRE AND POST TEST

Part I - Test given

be written on sheet

a. How do you spel

(2) smooth, (3) fil

(6) prick punch, (7

(9) ball pen, (10)

plane, (13) axle, (

(17) screw, (18) ef

7 (21) friction, (22)

a

b.

ort pulls

t?

PRE AND POST TEST

Part I - Test given orally by teacher, answers to be written on sheet of paper provided:

a. How do you spell these words: (1) characteristic, (2) smooth, (3) file card, (4) chisel, (5) scriber, (6) prick punch, (7) combination square, (8) trammels, (9) ball pen, (10) fillister, (11) lever, (12) inclined plane, (13) axle, (14) wheel, (15) pulley, (16) wedge, (17) screw, (18) efficiency, (19) energy, (20) potential, (21) friction, (22) technology (23) lathe, (24) material,

5. Name ten of the twenty-five machines you were introduced to in the shop.

6. Which of the article listed are not safe to be worn in shop.

   1. Chain bracelet
   2. Leather watch band
   3. Long sleeves
   4. Long pants

True or False

1. Stop a moving part of machine with hands.
2. Turn the power on a machine that another person is operating.
3. Help another person lift a heavy object that he could lift himself.
4. A person should not talk to another while operating a machine.
5. Machine should be stopped when making adjustments.

3. There
the
4. What i
5. What i
advant
mechan
6. How do
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7. How muc
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8. An incl
Neglect
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9. A subma
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exerted
the den
10. How doe
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ines you were

not safe to

th hands.

another

object that

ner while

aking

3. There are only two groups of basic machines, the _____ and the _____.

4. What is friction?

5. What is the difference between actual mechanical advantage of a machine and its theoretical mechanical advantage?

6. How do we distinguish among the three classes of levers?

7. How much work does a student do on 5 lbs of books when he carries them up 24 ft. to the third floow?

8. An incline plane is 16 ft. long and 4 ft. high. Neglecting friction, what effort is required to roll a 360 lb. barrel up the plane?

9. A submarien is traveling 300 ft. below the surface of the ocean. How much pressure is exerted on a square inch of the submarine if the density of sea water is about 64 lbs/cu. ft.?

10. How does the close arrangement of molecules in a liquid help us do work?

3. An inclined plane is 16' long and 3 ft. high.

   (a) How much force is required to push a 320 lb body up the incline?

   (b) How much work will be done?

4. How long must the handle of a windlass be if an effort of 12 lb. is to raise a 60 lb. pail of water fastened to the drum? The radius of the drum is 3 in.

5. A force of 10 lb. is applied to a pair of pliers to cut a wire at a distance of ½ in. from the pin. If the distance from the hand to the pin is 10 in., what is the resistance of the wire?

6. What is the mechanical advantage of a 6 in. nut-cracker in which the nut is placed at an average distance of 3/4 in. from the pin?

7. What weight can be raised by a jackscrew having a pitch of 1/5 in. and a 2 ft. lever, when a force of 12 lb. is applied?

8. Draw a wheel and axle that will have a mechanical advantage of 8. Show the dimensions.

(25) milling mac
transform, (29)
(32) compound
b. How are you
read these direc
carefully and fo
(1) Don't do an
this entire list
on your paper.
(4) Draw a rect
out of your desk
back down. (6)
hand. PAUSE (8)
directions, all
on your paper an
Part II - Writte
a. In what ref
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(1) some i
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of pliers to cut

pin. If

s 10 in.,

in. nut-

n average

w having a

n a

mechanical

(25) milling machine, (26) shaper, (27) machinery, (28) transform, (29) transfer, (30) simple, (31) complex, (32) compound

b. How are you at following directions? I will read these directions to you. You are to listen carefully and follow the directions.

(1) Don't do anything until I have finished reading this entire list of directions. (2) Write your name on your paper. (3) Draw a circle around your name. (4) Draw a rectangle around this circle. (5) Get out of your desk, turn around three times, and sit back down. (6) Bark like a dog. (7) Raise your right hand. PAUSE (8) Now that I've finished reading these directions, all I want you to do is put your name on your paper and pass it in.

Part II - Written

a. In what reference book, would you look for information on each of the following topics:

(1) some important event of three or four months ago?

9. If an inclined plane is 3 ft. high, how long must it be to have a mechanical advantage of 8?

10. The efficiency of an automobile elevator is 60%. If a 4,000 lb. automobile is to be raised 5 ft., how much work must be put into the machine?

(2) someth

(3) the or

b. Write direc

this school

c. Read the fo

the best co

The field c

it is not very p

with talent.

A cricket c

the number of ch

seconds. Then a

The male cr

He plays his son

front wings toge

mile away.

The female

female crickets

They're lucky.

y long

ge of 8?

or is 60%.

ed 5 ft.,

hine?

(2) something that happened 300 or 400 years ago?

(3) the origin of a certain work?

b. Write directions for getting to your home from this school.

c. Read the following selection, and then choose the best completion.

The Talented Cricket

The field cricket is less than an inch long, and it is not very pretty. But, for a bug, it is loaded with talent.

A cricket can tell you the temperature. Count the number of chirps you hear from a cricket in 15 seconds. Then add 37.

The male cricket is a musician - a violinist. He plays his song by rubbing the inner edges of his front wings together. Sometimes you can hear him a mile away.

The female has no "voice". But both male and female crickets have ears - in their front legs. They're lucky. Most insects have no ears at all.

11

LABORATORY

Crickets ar

can jump a hundr

Cricket fig

In China, a good

a horse. Often

fights. It is s

Genghis Khan ear

1. The author'

a. to expl

b. to ask

c. to tell

d. to prai

2. From the in

not say tha

a. the cric

b. crickets

c. female c

d. crickets

3. A word oppos

13 a. back

Crickets are also good broad jumpers. A cricket can jump a hundred times its length.

Cricket fights are popular among the Chinese. In China, a good fighting cricket may cost as much as a horse. Often there is heavy betting on these fights. It is said that a famous cricket named Genghis Khan earned $90,000 in his lifetime.

1. The author's purpose is _____.
   a. to explain why he owns a cricket.
   b. to ask for cricket fights in the U. S.
   c. to tell interesting things about the cricket.
   d. to praise Genghis Khan.
2. From the information in this article, you could not say that _____.
   a. the cricket is an insect.
   b. crickets are good broad jumpers.
   c. female crickets make noise.
   d. crickets are found in China.
3. A word opposite in meaning to inner is _____.
   a. back

b. side

c. outer

d. end

_____f

S

C. Materials

1. Enclyclo

2. Dictiona

3. Readers'

4. Dimensio

5. Question

6. Social S

7. Applicat

b. side

c. outer

d. end

_____ from Dimensions

Scholastic Book Services

C. Materials

1. Enclyclopedias

2. Dictionaries

3. Readers' guides

4. Dimensions - Score Reading Skills Books

5. Questionnaires, Medical

6. Social Security forms

7. Application blanks (employment)

LABORATORY	
	TEACHING PROCEDU 1. Discus machin 2. Demons frictio 3. Small pulley 4. Proble simple STUDENT ACTIVITI 1. Studen the vo 2. Studen moment 3. Studen the ma POST TEST

TEACHING PROCEDURES

1. Discussion on specific types of simple machines.
2. Demonstration (Some of the methods of producing friction).
3. Small group discussion and demonstration on pulley systems, levers, inclined planes.
4. Problem solving of mechanical advantages of simple machines.

STUDENT ACTIVITIES

1. Student will make inclined planes and calculate the work done by these planes.
2. Student will make graphs applying the law of moment for the three classes of levers.
3. Student will set up a pulley system and calculate the mechanical advantage.

POST TEST

MEASUREMENT

MEASUREMENT

L A B O R A T O R Y

OBJECTIVES: MEASUREMENT

1. The student will be able to identify the five or six major parts of the outside micrometer.
2. The student will be able to identify any fractional mark on the steel rule without counting the marks.
3. The student will be able to read the measurement of any dimension within the range of the one inch micrometer.
4. The student will be able to read and set down correctly on paper any measurement using a six inch verneer caliper.

OBJECTIVES: ME

1. To fi
2. To fi units notat
3. To ca exper const
4. To us (Foot Absol
5. To ch feet;
6. To fi tempe
7. To ap the u
8. To fi using

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SCIENCE

OBJECTIVES: MEASUREMENT

1. To find the cubic volume of a small box.
2. To find the distance from earth to the sun in units of feet, meters, and miles by exponential notations.
3. To calculate the percentage of error from experimental data as compared to standard constants.
4. To use units of measurements in different systems. (Foot-pound, Centimeter-gram-second, Engineering, Absolute, etc.)
5. To change centimeters and meters to inches and feet; pounds to kilograms; liters to quarts.
6. To find volume changes of a gas at different temperatures.
7. To apply the major concept of Boyles law with the use of a mamometer.
8. To find the specific gravity of a desk reagent by using the hydrometer.

MATHEMATICS	C
OBJECTIVES: MEASUREMENT	OBJECTIVES: MEASURE
A. Ruler measurements.	1. 10 out of
1. Common ruler fractions.	at least c
1.1 Addition.	measuremen
1.2 Subtraction.	2. 9 out of 1
1.3 Multiplication.	at least t
1.4 Division.	3. 9 out of 1
2. Measurements with the steel scale.	correctly
2.1 Cumulative error.	with measu
3. Decimal fractions.	4. 9 out of 1
3.1 Addition.	correctly
3.2 Subtraction.	5. 10 out of
3.3 Multiplication.	about and
3.4 Division.	about thei
3.5 Rounding off decimals.	ponsibilit
4. Decimal equivalents.	
4.1 Changing a fraction to a decimal.	
4.2 Changing a decimal to a fraction.	
4.3 Measurements of decimal fractions with the steel scale.	19

OBJECTIVES: MEASUREMENT

1. 10 out of 10 students will be able to give at least one reason for the importance of measurement.
2. 9 out of 10 students will be able to use at least two systems of measurement.
3. 9 out of 10 students will be able to use correctly some of the prefixes connected with measurement.
4. 9 out of 10 students will be able to spell correctly all the words in the list given.
5. 10 out of 10 students will write paragraphs about and will take part in a discussion about their place in the universe and their responsibilities as individuals.

mal.

tion.

tions with

LABORATORY	
	9. To rela frictio metal s

	SCIENCE
	9. To relate high and low viscosity rates with frictional resistance. (Demonstrate by use of metal surface with heavy oils, light oils.)

5. Percent.

5.1 Percent error in measurements

6. The circle and its measurements.

6.1 Radius.

6.2 Diameter.

6.3 Chord.

6.4 Circumference.

6.5 Area.

B. Angular measurement.

1. The protractor.

2. The degree, minute, and second.

3. The mil.

C. Auxiliary measuring devises and their use.

1. Vernier calipers.

2. The micrometer.

3. Outside calipers.

4. Inside calipers

5. Hermaphrodite calipers.

6. Dividers.

	COMMUNICATIONS

.

use.

LABORATORY	
	OUTLINE OF CONTEN
	A. Linear
	1. Vol
	2. Dis
	3. Per
	B. Metric
	1. His
	2. Eng
	3. Pro
	a.
	b.
	c.
	4. Sys
	a.
	b.
	c.
	d.
	5. Con
	a.
	22 b.

OUTLINE OF CONTENT

A. Linear Measurements

1. Volume

2. Distance

3. Percentage of error

B. Metric System (class requirement)

1. History of measurements

2. English system of measurement

3. Properties and measurement of matter

a. volume

b. mass

c. weight

4. Systems of measurements

a. Centimeter-gram-second (CGS)

b. Meter-Kilogram-Second (MKS)

c. Foot-pound-second (FPS) (English engineering)

d. English Absolute

5. Conversion in measurements

a. English to metric

b. Metric to English

23

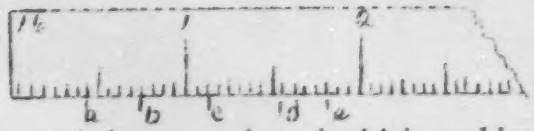
COMMUNICATIONS

23

LABORATORY

PRE AND POST TEST

1. Write the correct fraction for the following problems:



2. Put period over each mark which would read in eights of an inch or ruler above.

3. Measure each of the following lines to the nearest 1/16 using your steel rule.

a._____ b._____ c._____ d._____ e._____

6. Meas

7. Usef

a.

b.

c.

d.

e.

C. DENSITY

D. SPECIFIC

E. VISCOSIT

PRE AND POST TEST

1. Discuss in every

2. What are time, fo system?

3. What is mass of

4. How many many ga

6. Measurement of temperature

7. Useful Constants and Formulas

a. pressure in liquids

b. Pascal Law

c. Charles Law

d. Boyles Law

e. Liquid transmit pressure

C. DENSITY

D. SPECIFIC GRAVITY

E. VISCOSITY

PRE AND POST TEST

1. Discuss the importance of measurement in science, in every day living.

2. What are the basic units of length, mass, volume, time, force, energy, and power in the metric system?

3. What is the difference between the weight and mass of an object?

4. How many liters are there in 400 Milliliters? How many gallons are there in the same amount of liters?

PRE AND POST TEST

Add the following fractions.

1. $\frac{3}{16} + \frac{5}{8}$

2. $\frac{15}{32} + \frac{1}{4}$

3. $\frac{13}{64} + \frac{3}{32} + \frac{1}{4}$

4. $\frac{3}{8} + \frac{1}{2} + \frac{11}{32}$

Subtract the following.

5. $\frac{3}{4} - \frac{3}{8}$

6. $\frac{63}{64} - \frac{15}{16}$

7 $\frac{5}{8} - \frac{5}{32}$

8. $\frac{11}{16} - \frac{1}{4}$

Multiply the following.

9. $\frac{3}{4} \times \frac{7}{8}$

10. $\frac{1}{2} \times \frac{15}{32}$

PRE AND POST TEST

Part I - Test g

be written on s

How do you spel

(2) scale, (3)

(6) centimeter,

meter, (10) gra

diameter, (14)

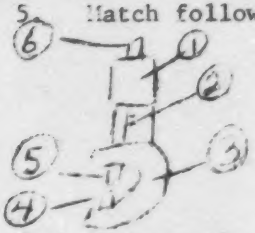
caliper

Part II Written

	COMMUNICATIONS
	PRE AND POST TEST Part I - Test given orally by teacher, answers to be written on sheet of paper. How do you spell these words? (1) Micrometer, (2) scale, (3) fraction, (4) decimal, (5) millimeter, (6) centimeter, (7) decimeter, (8) meter, (9) kilometer, (10) grams, (11) liter, (12) radius, (13) diameter, (14) circumference, (15) Vernier, (16) caliper Part II Written

4. Write down the reading of each mark within one inch on the ruler using the 1/16 scale.

5. Match following name of parts to micrometer



Ratchet
Thimble
Frame
Hub or Sleeve
Anvil
Spindle

6. Measure the six blocks with the micrometer and write down each measurement.

7. Set the verneer caliper on following reading:

   a. 1.200 b. 2.312 c. 2.877

8. Measure test bar with verneer caliper and correctly state it on answer sheet.

5. A rect
2.5 ft
volume

6. The vo
its we
unknow

7. A rect
wide a
its vo

8. The vo
25 deg
decrea
the fi
law ap

9. The su
from e
ponenti

10. State
hydraul

	SCIENCE
rk within one scale. micrometer icrometer ing read- iper and t.	5. A rectangular wooden crate is 60 ft. long, 2.5 ft. wide, and 36 in. high. Find the volume of the crate. 6. The volume of an unknown fluid is 30 milliters, its weight is 240 grams. What is the denisty of this unknown fluid? 7. A rectangular box 3.0 meters long, 2.3 meters wide and 150 centimeters in depth, determine its volume in cubic meters. 8. The volume of a confined gas is 10 liters at 25 deg. Centigrade. The temperature is decreased to 12 deg. Centigrade. What is the final volume of the confined gas? Whose law applies in this problem? 9. The sun is approximately 96,000,000 miles from earth. Express this distance in exponential notation. 10. State Pascal's law. Apply this law to the hydraulic jacks, or brakes.

Divide the following.

11. $\frac{3}{4} \div 2$ 12. $\frac{7}{8} \div 8$

The following measurements are obtained from a scale with "readable graduations". Express them correctly by reducing them to the lowest terms.

13. $\frac{4}{32}$ in. 17. $\frac{20}{32}$ in.

14. $\frac{8}{32}$ in. 18. $\frac{24}{64}$ in.

15. $\frac{12}{32}$ in. 19 $\frac{48}{64}$ in.

16. $\frac{8}{64}$ in. 20. $\frac{32}{64}$ in.

Measure each of the following lines to the nearest 16th inch.

21._____ 23. _____

22.___ 24. _____

25. What is a fraction?

a. What do the
centi- mean
b. Name at lea
c. Name at lea
important.
d. What do you
your fellow

C. Materials

1. Booklets -
The Lufkin

27 2. Films

S	COMMUNICATIONS
rom a ss them terms. e	a. What do the prefixes micro-, deci-, milli-, and centi- mean? b. Name at least two different systems of measurement. c. Name at least two reasons that measurement is important. d. What do you believe is your responsibility to your fellow man? C. Materials 1. Booklets - The Amazing Story of Measurement, The Lufkin Rule Company 27 2. Films

LABORATORY

28

28

(a) "The

for discus

responsibi

(b) "The

3. Books

(a) <u>Me, M</u>

(b) <u>The C</u>

4. Collection

<u>Who Am I?</u>

5. Poems

"No Man is

(a) "The Powers of Ten" - Used as spring-board for discussion of man and his importance and responsibility as an individual

(b) "The Hangman"

3. Books

(a) Me, Natalie

(b) The Ox-Bow-Incident

4. Collection of short stories

Who Am I?

5. Poems

"No Man is an Island"

LABORATORY	
	TEACHING PROCEDUR 1. Discuss 2. Discuss ments. 3. Problem 4. Experim and Boy 5. Lecture laws to STUDENT ACTIVITIE 1. Student volume 2. Student English centime 3. Student demonst POST TEST

TEACHING PROCEDURES

1. Discuss volumetric and linear measurement.
2. Discussion of different systems of measurements.
3. Problem solving on conversions of measurements.
4. Experimentation and demonstration of Charles and Boyle's laws.
5. Lecture to summarize theories, principles and laws to apply major concept.

STUDENT ACTIVITIES

1. Student will find the linear measurements and volumes of blocks and solid objects.
2. Students will solve problems using units in English absolute, metric, Kilogram, metric centimeter systems.
3. Student will make a manometer and use it to demonstrate Boyle's law.

POST TEST

INTERPRETATION OF DRAWINGS AND SYMBOLS

INTERPRETATION OF DRAWINGS AND SYMBOLS

L A B O R A T O R Y	
OBJECTIVES: INTERPRETATION OF DRAWINGS AND SYMBOLS	OBJECTIVES: INTERP
1. Students shall be able to sketch one, two and three view drawings of one part objects.	1. To measu laborato
2. He shall be able to make a project within the stated tolerance from a drawing.	2. To recor of a veh from how
	3. To inter EGS, MYS tome, fe machine every da
	4. To inter referenc
	5. To inter form pow with pow
	6. To inter emphasi element

D SYMBOLS

of one

ect within

ving.

S C I E N C E

OBJECTIVES: INTERPRETATION OF DRAWINS AND SYMBOLS

1. To measure the dimensions of the science laboratory and make a convient conversion scale.
2. To record the distances in miles on a speedometer of a vehicle at the start and end of a trip from home to school.
3. To interpretate the units of measurements in EGS, MKS, AND CGS with respect to mass length, tome, force, energy, and power used in the machine in the laboratory, industry and every day living.
4. To interpret the meaning of ST, SP and STP with reference to temperature and pressure.
5. To interpret, calculate and demonstrate in written form positive and negative exponential expressions with powers of tens.
6. To interpret graphs and charts with special emphasis placed upon periodic charts of the elements.

MATHEMATICS	C
OBJECTIVES: INTERPRETATION OF DRAWINGS AND SYMBOLS	OBJECTIVES: INTERPRETA
A. Ratio and proportion	1. 9 out of 10
	correctly al
B. Sketching	2. 10 out of 10
	blueprint co
C. Dimensioning	blueprint is
1. Finding missing dimensions	3. 9 out of 10
	examples of
2. Limit system of dimensioning (tolerance)	4. 7 out of 10
	symbolism in
D. Symbols	5. 9 out of 10
	the words we
E. Charts	

OBJECTIVES INTERPRETATION OF DRAWINGS AND SYMBOLS

1. 9 out of 10 students will be able to spell correctly all the words in the list given.
2. 10 out of 10 students will tell what a given blueprint communicates to them - how a blueprint is a communication device.
3. 9 out of 10 students will be able to give examples of commonly used symbols in our lives.
4. 7 out of 10 students will be able to spot symbolism in literature.
5. 9 out of 10 students will be able to show that the words we use are symbols.

LABORATORY	
	OUTLINE OF CONTENT
	A. Choosing s
	1. Floor
	2. Interp scale
	3. Conver
	4. Symbol
	5. Relati
	6. The pe
	a. A
	b. a
	c. s
	d. p
	7. Expone
	a. m
	b. di

OUTLINE OF CONTENT

A. Choosing scales

1. Floor plan of physical Science Laboratory

2. Interpretation of sizes and distances from scale drawings.

3. Converting actual lengths to scales.

4. Symbols readings and equivalents

5. Relating units to EGS, MKS, and CGS systems.

6. The periodic chart of elements

a. Atomic number of element

b. atomic weight

c. symbol and name of element

d. periods and family groups

7. Exponential notations

a. multiplication

b. division

L A B O R A T O R Y

PRE AND POST TEST

1. The following notation on a drawing has a tolerance of how much?

   a. $1\frac{1}{2}'' \begin{smallmatrix} + \frac{1}{64} \\ - \frac{1}{64} \end{smallmatrix}$ b. $1.500 \begin{smallmatrix} + 0.001 \\ - 0.002 \end{smallmatrix}$

   c. 1.502
      1.498

2. Which of these indicate a hidden line?

   a. _____ b. _____

   c. _____

3. Draw three view drawing of a rectangular 1" x 2" x ½" in size with ½" hole through center of large side.

4. Draw an isometric drawing of the same object of number 3.

5. What do the following symbols stand for:

   a. ½ 20 NC b. 3/8 NC LH c. scale 1:2

PRE AND POST TES

1. Give t
   number
   a. Zi
   b. Fe
   c. Ni
   d. Ti
   e. Al
2. Balanc
   Fe + (
   Cu + H
   Hot AI
   Al + H
3. What i
   conditi
4. What i
   thermo
5. What i
   thermo

g has a

1
2

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PRE AND POST TEST

1. Give the correct symbol and oxidation numbers of the following.

a. Zinc	f. Zinc Oxide
b. Ferrous	g. Ferric Oxide
c. Nickel	h. Aluminum Nitrate
d. Tin	i. Copper (II) Sulfate
e. Aluminum	j. Lead Dioxide

2. Balance the following equations.

$Fe + O_2 \rightarrow Fe_2O_3$

$Cu + HNO_3 \rightarrow Cu(NO_3)_2 + NO_2 + H_2O$

Hot $AI + HOH \rightarrow AI(OH)_3 + H_2\uparrow$

$Al + HCl \rightarrow AlCl_3 + H_2\uparrow$

3. What is the meaning of STP for standard conditions?

4. What is the Fahrenheit temperature if the thermometer reads 200 deg. Centigrade?

5. What is the Celsius temperature if the thermometer reads 50° F?

LABORATORY	
	6. How many there? 7. How are t most orbi 8. If a scal of a roon 2½' by 2' 9. If the at atomic we electrons 10. Using the would you TEACHING PROCEDURES 1. Discussio 2. Lecture a reading. 3. Group and symbols, 4. Problem s

6. How many groups or families of elements are there?

7. How are the groups of elements and the outer most orbit related?

8. If a scale is ¼" = 2', find the area of the floor of a room whose dimensions are represented as 2½" by 2¼.

9. If the atomic number of an element II and the atomic weight or mass is 23, how many protons, electrons and neutrons does this element have?

10. Using the scale 1 inch = 5 ft., how many inches would you use to represent a desk 28 inches high?

TEACHING PROCEDURES

1. Discussion on scale drawings.

2. Lecture and demonstration on charts and graph reading.

3. Group and individual participation in writing symbols, elements, compounds, and equations.

4. Problem solving of scale interpretations.

COMMUNICATIONS

LABORATORY	
	STUDENT ACITVITIES 1. Student v compound 2. Student v 3. Student v Standard POST TEST

STUDENT ACITVITIES

1. Student will use symbols for writing elements, compounds, and equations.
2. Student will convert actual lengths to scale.
3. Student will use equivalent for expressing Standard conditions.

POST TEST

DRILLING

8

DRILLING

L A B O R A T O R Y	
OBJECTIVES: DRILLING 1. Student will be able to recognize by sight and set speed, set up work and perform the following operations on two of the four types of drill presses: drill holes, ream holes, countersink, and counterbore.	OBJECTIVES: DRILLIN 1. To use di to indica resistant 2. To demons by the us and a spr 3. To demons a system 4. To make s thickness 5. To calcul clined pl 6. To demons of speed 7. To use th kinetic e

ight

the

r

re.

SCIENCE

OBJECTIVES: DRILLING

1. To use different classes of leavers and to indicate the parts (fulcum, effort arm, resistant arm).
2. To demonstrate how energy can be transmitted by the use of a metric stick, small weights, and a spring (scale).
3. To demonstrate how the skeleton is used as a system of pivots and levers.
4. To make screws by wrapping paper of different thickness around nails.
5. To calculate the mechanical advantages of inclined planes and levers.
6. To demonstrate with toy cars the difference of speed acceleration and velocities.
7. To use the units of energy in calculating kinetic energy of moving bodies.

MATHEMATICS	
OBJECTIVES: DRILLING	OBJECTIVES: DRILLING
A. Geometry of the circle	9 out of 10 stud
B. The lever and its applications	correctly all th
C. The pulley and its applications	
D. Taps and tap drill sizes	
1. Calculation	
2. Chart	
E. Cutting speeds	
1. Change fpm to rpm	
1.1 Calculation	
1.2 Chart	
F. Reaming	
1. Calculation of drill size	
G. Spotfacing	
1. Calculation of diameter to spotface	
H. Countersinking	
1. Calculation of depth to countersink	

OBJECTIVES: DRILLING

9 out of 10 students will be able to spell correctly all the words in the list given.

ce

nk

LABORATORY	
	OUTLINE OF CONTENT A. General Pr 1. Concep 2. Force 3. Accele 4. Accele B. Motion 1. Energy 2. Potent 3. Kineti 4. Kineti 5. Units 6. Transf C. Friction as it a. b.

OUTLINE OF CONTENT

A. General Principle of Machines

1. Concepts of speed, velocity and acceleration.
2. Force as related to mass and acceleration.
3. Acceleration variable force and mass.
4. Acceleration due to gravity.

B. Motion

1. Energy
2. Potential energy
3. Kinetic Energy
4. Kinetic Molecular Theory
5. Units of energy
6. Transformation of energy

C. Friction

as it relates to simple machines

a. Screws

b. Levers

S	COMMUNICATIONS

L A B O R A T O R Y

PRE AND POST TEST

1. Name the two things that identifies the sensitive drill press.
2. Identify the following parts of the radial drill press from the drawing.

   a. arm b. column c. head

   d. table e. base
3. Drill ¼ hole in material supplied and countersink for ¼ flat head machine screw.
4. Drill second hole 3/8" and counterbore for socket head capscrew.
5. Drill third hole and ream 5/16".
6. Sharpen a twist drill and drill hole with it.

PRE AND POST TEST

1. Write t
   below i
   a. For
   b. Num
      in
   c. Rat
   d. For
   e. Pus
   f. Det
   g. Res
      of
   h. Rat
   i. Two
   j. Rat
      per
   k. Abi
   l. Ene
2. Problem
   a. A 3
      sec

s the

e radial

and

e screw.

rbore for

ole with

SCIENCE

PRE AND POST TEST

1. Write the terms for the phrases described below in the proper space.

a. Force per unit area.
a. _____

b. Number of times a machine multiplies force in spead.
b. _____

c. Rate of doing work.
c. _____

d. Force times the distant the force acts.
d. _____

e. Push or pull.
e. _____

f. Determined by both speed and direction.
f. _____

g. Resistance of a body to change in its state of motion.
g. _____

h. Rate of change of Velocity.
h. _____

i. Two basic types of machines.
i. _____

j. Ratio of output of work to input of work in per cent.
j. _____

k. Ability to do work.
k. _____

l. Energy of work.
l. _____

2. Problems

a. A 3200 lb. car is traveling at a rate of 44 ft. sec. (30 MPH). The acceleration due to

MATHEMATICS	C

LABORATORY	
	gravity i Kinetic e b. What is t object wh at a velo c. A car wei to a heig potential TEACHING PROCEDURES 1. Demonstra 2. Discussio 3. Experimen 4. Problem S 5. Lecture STUDENT ACTIVITIES 1. Students classes o effort an 2. Student w

gravity is 32 ft/sec/sec. Calculate the Kinetic energy.

b. What is the Kinetic energy of an object of an object whose mass is 100 grams that is traveling at a velocity of 5 centimeters per second?

c. A car weighs 4000 lbs. It is raised on a lift to a height of 8 feet. What is the gravitational potential energy?

TEACHING PROCEDURES

1. Demonstrations
2. Discussions
3. Experimentation
4. Problem Solving
5. Lecture

STUDENT ACTIVITIES

1. Students will demonstrate with the different classes of levers and show the fulcrum, the effort and the resistant arms.
2. Student will experiment with meter stick, weights,

LABORATORY	
	and spri transmit 3. Student potentia POST TEST

and spring scales; and show how energy is transmitted.

3. Student will solve problems for kinetic and potential energy.

POST TEST

THE LATHE

THE LATHE

LABORATORY	
OBJECTIVES: THE LATHE	OBJECTIVES: THE LA
1. He shall properly oil the lathe before beginning work each day according to instructions.	1. To demons work by m 10 ft. to
2. He shall recognize the different types of lathes by placing name under the picture of each.	2. To diagno resultant angles to
3. He shall perform twelve operations by making projects which involve these operations.	3. To demons meter sti equilibri (clockwis
	4. To compar force of and a sma surface.
	5. To demons ing a mar
	6. To demons proportio and the m

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by

operations.

SCIENCE

OBJECTIVES: THE LATHE

1. To demonstrate the foot-pound as a unit of work by moving a 75 lb. object a distant of 10 ft. to determine the amount of work done.
2. To diagnose force table and illustrate the resultant of two forces acting at right angles to each other.
3. To demonstrate on table set-up of pivoted meter stick the necessary weights to show equilibrium conditions of moment of force (clockwise torque, conterwise torque).
4. To compare the force of rolling friction with force of sliding friction using wooden blocks and a small cart on an incline plane with smooth surface.
5. To demonstrate the property of inertia by shooting a marble against a baseball.
6. To demonstrate with toy cars that force is directly proportional to the mass and acceleration, Fe MA., and the mass is directly proportional to the

MATHEMATICS	
OBJECTIVES: THE LATHE	OBJECTIVES: THE LATHE
A. Computing spindle speeds	1. 8 out of 10 s
1. Ratio and proportion	paper on some
1.1 with pulleys	lathe or mach
1.2 with gears	2. 7 out of 10 s
B. Calculating feeds and speeds	correctly all
1. Charts	
2. Formulae	
2.1 Converting fpm to rpm	
C. Center drilling	
1. Locating the center of a circle	
1.1 Mathematical methods	
1.2 Mechanical methods	
2. Testing centers	
3. Selecting the center drill	
3.1 Measuring the diameter	
3.2 Calculation	
3.3 Chart	
D. Rough and finish turning	
1. Calculating and measuring rough turned	

OBJECTIVES: THE LATHE

1. 8 out of 10 students will write a research paper on some subject connected with the lathe or machine technology.
2. 7 out of 10 students will be able to spell correctly all the words in the list given.

LABORATORY	
	accelera the forc 7. To demon Third La

acceleration and indirectly proportional to the force.

7. To demonstrate the application of Newtons Third Law with a rotary Sprinkler.

diameters

2. Use of the cross-feed to finish turn

2.1 Limits

2.2 Calculating graduations for adjusting cross feed

E. Facing

1. Cutting speeds for facing

2. Facing to length

2.1 The hook rule

F. Undercutting and recessing

1. Calculating depth of undercut

2. Calculating cross-feed graduations

G. Shoulder turning

1. Use of the radius gage

H. Knurling

1. Calculating rpm of work

I. Filing and polishing

1. Calculating spindle speeds

J. Drilling and reaming

1. Converting diameter of reamed holes to

55

	COMMUNICATIONS
rn	
djusting	

LABORATORY

Y	SCIENCE

drill sizes.

1.1 Chart

2. Cutting speed for reaming

K. Turning and boring tapers

1. Taper per inch

2. Offset method

2.1 The pythagorean theorem

3. Taper attachment

3.1 Right triangle trigonometry

3.2 The protractor

L. Cutting screw threads

1. Terminology

1.1 Internal and external threads

1.2 Major diameter and its calculation

1.3 Minor diameter and its calcualtion

1.4 Pitch diameter and its calculation

1.5 Lead...

1.6 Lead angle...

1.7 Crest...

1.8 Root...

tion

tion

tion

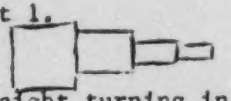
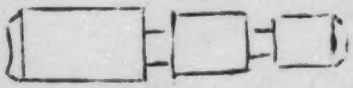
LABORATORY

MATHEMATICS	C
1.9 Depth...	
1.10 Limits o size..	
1.11 Tolerance	
1.12 Allowance...	
1.13 Basic size...	
1.14 Nominal size...	
1.15 Truncation...	
1.16 Depth of engagement	
2. Formulae for the unified thread	
2.1 Thread tables	
3. The quick change gear box	
4. Use of the screw thread tool gauge and the center gauge	
5. Computing the depth of infeed	
6. Multiple threads	
7. Methods and instruments for measuring threads.	
7.1 The thread pitch gauge	
7.2 The ring thread gauge	
7.3 Thread micrometer	
7.4 Thread plug gauge	59

and the

ing threads.

7.5 The three wire method

LABORATORY	
	OUTLINE OF CONTENT A. The scien B. Force C. Motion an D. Friction a. Slidi b. Rolli E. Newtons L 1. Newto 2. Newto 3. Newto
PRE AND POST TEST Test 1.  Straight turning in an independent chuck. Turning to a shoulder. Holding a given tolerance on all dimensions. Test 2.  Straight turning between centers. Turning to a shoulder.	PRE AND POST TEST 1. What forc a small c 5 N/sec/ 2. State New forces ar volved? 3. What prop we measur

OUTLINE OF CONTENT

A. The scientific meaning of work

B. Force

C. Motion and Velocity

D. Friction

a. Sliding

b. Rolling

E. Newtons Laws of Motion

1. Newton's first law of motion

2. Newton's second law of motion

3. Newton's third law of motion

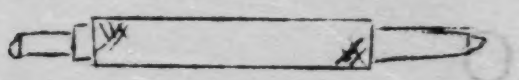
PRE AND POST TEST

1. What force in Newton's is required to accelerate a small cart with a mass of 10 kg at a rate of 5 N/sec/sec in an easterly direction.

2. State Newton's third law of motion. How many forces are involved? How many objects are involved?

3. What property of an object do we measure when we measure its mass?

ons.

LABORATORY	
Undercutting	4. The rate
Chamfering	called __
Filing	5. How many
Holding a given tolerance on all dimension.	the follo
Test 3. Centerpunch	a. An el
	weigh
Facing in chuck	the g
Straight turning	b. A tra
Turning taper with compound rest	of 20
Knurling	c. A cra
Filing and polishing	to th
Test 4.	
Straight turning between centers	
Turning to a shoulder	
Facing	
Turning a taper with taper attachment	
Chamfier	
Undercutting	
Threading	64

on.

4. The rate of change in velocity of an object is called _____.

5. How many foot pounds of work are done in each of the following examples?

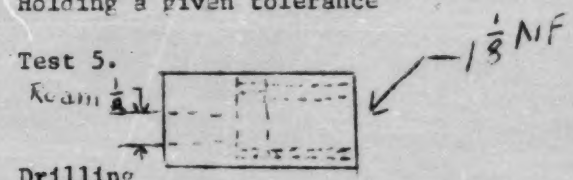
   a. An elevator weighing 1000 pounds lift a man weighing 200 lbs. to a height 30 ft. above the ground.

   b. A tractor pulls on a tree stump with a force of 2000 pounds, but the stump does not move.

   c. A crane lifts a steel beam weighing 400 lbs. to the top of a 300 feet high building.

Holding a given tolerance

Test 5.



Drilling

Reaming

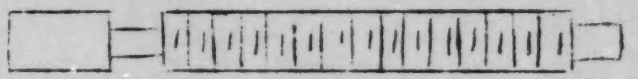
Boring

Recessing

Internal threading

Facting

Test 6.



Undercutting

Facing

Cutting acme thread using follower rest

Test 7.

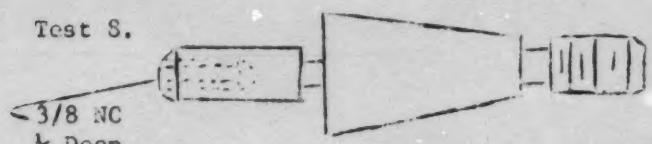
Straight truning on mandrel

Facing between centers

Drilling

Reaming

MATHEMATICS	

LABORATORY	
Turning to shoulder Test S.  Facing Straight turning between centers Taper turning with taper attachment Undercutting Threading Drilling Tapping Chamfering Filing and polishing Holding a given tolerance on all dimension	

LABORATORY	
	TEACHING PROCEDURE 1. Demonstr 2. Problem 3. Lecture STUDENT ACTIVITIES 1. Student the null 2. Student POST TEST

TEACHING PROCEDURES

1. Demonstrations
2. Problem Solving
3. Lecture

STUDENT ACTIVITIES

1. Student will demonstrate the work done through the pulley system
2. Student will apply Newton's Laws of Motion.

POST TEST

MILLING MACHINE

MILLING MACHINE

L A B O R A T O R Y	
OBJECTIVES: MILLING MACHINE	OBJECTIVES: MILLI
1. The student shall be able to select the proper cutter and type milling machine to do side milling, plain milling, straddle milling, end milling, index milling, and helical milling by making projects which require this.	1. To perfo spring s property
2. The student shall set up work on milling machine using six different methods to hold work.	2. To demon talcum p water.
3. The student shall set speeds and feeds on the milling machine by calculation and chart.	3. To exper objects, adhesion
	4. To discu temperatu
	5. To discu definite
	6. To deter of a meta
	7. To calcul vaporizat
	8. To discus be transf

the
ne to
ddle
and
hich

lling machine
work.
ds on the
hart.

SCIENCE

OBJECTIVES: MILLING MACHINE

1. To perform an experiment on Hooke's law using spring scales and weight indicating the property of elasticity.
2. To demonstrate the property of cohesion by using talcum powder and powdered zinc sterate on water.
3. To experiment with soapless detergents, oiled objects, and to demonstrate the properties of adhesion and surface tension.
4. To discuss the difference between heat and temperature and show how they relate.
5. To discuss that boiling and freezing points are definite with pure substance.
6. To determine the coefficient of linear expansion of a metal with the linear expansion apparatus.
7. To calculate the specific heat of fusion and vaporization of a solid and a liquid.
8. To discuss the method by which heat energy may be transferred from one point to another.

MATHEMATICS	CO
OBJECTIVES: MILLING MACHINE	OBJECTIVES: MILLING M
A. Speeds and feeds for milling	7 out of 10 stude
1. Calculation	correctly all of
2. Charts	
B. Side milling square and hex heads on bolts	
1. Calculating diameter of stock to mill flats	
C. Straddle milling	
1. Selecting cutters and spacers	
2. Calculating distance to move table	
D. Computing and gauging key seats	
E. Indexing	
1. Circular measurement in degrees, minutes, and seconds	
2. Indexing for gear cutting	
F. Helical milling	
1. The helix and the spiral	
1.1 The helix angle	
1.2 The helix lead	
2. The trigonometry of the right triangle	

	C O M M U N I C A T I O N S
	OBJECTIVES: SPELLING MACHINE 7 out of 10 students will be able to spell correctly all of the words in the list given.
its il	
utes,	
1.	73

LABORATORY	

MATHEMATICS	
3. Gearing the milling machine to cut a helix	
3.1 Ratio and proportion	
G. Gear cutting	
1. Gear-tooth notation and formulae	
1.1 The involute curve	
1.2 Depth of tooth	
1.3 Gauging gear teeth	

	COMMUNICATIONS
t a	

LABORATORY	
	OUTLINE OF CONTE
	1. Behavi
	a. El
	b. Co
	c. Ac
	d. Su
	2. Molecu
	a. To
	b. Co
	c. Sc
	d. Ho
	e. Co
	f. Bo
	g. Yo
PRE AND POST TEST	PRE AND POST TE
Test 1. Square hammer head	1. How do
Select milling machine	that
Side milling	2. What
Plain milling	Explai
Set speed	76 3. Cohesi

OUTLINE OF CONTENT

1. Behavior of matter
   a. Elasticity
   b. Cohesion
   c. Adhesion
   d. Surface tension
2. Molecular Motion
   a. Temperature
   b. Coefficient of linear expansion
   c. Specific heat
   d. Heat of fusion
   e. Calories
   f. British Thermal Units (BTU)
   g. Methods of heat transfer

PRE AND POST TEST

1. How does the resiliency of steel compare with that of rubber?
2. What is elasticity? Is all matter elastic? Explain.
3. Cohesion and adhesion are forces between

	COMMUNICATIONS

set feed

Select work holding method

Test 2. T tap wrench

Select milling machine

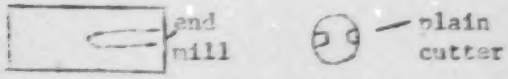
Select cutter

Set speed and feed

Select work holding method

Slott milling

Test 3. Keyway cutting

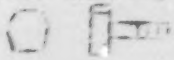


Select milling machine

Select cutters (end mill - plain milling cutter)

Set speed and feed

Select work holding method (vise or indexing attachment)

Test 4.  Mill hex on head of bolt

Select milling machine

Select cutters for straddle milling

Set up indexing attachment

Set speeds and feeds

Find center over work

molecul

them?

4. What is

gravity

5. How muc

water

deg C?

of wate

6. How muc

peratur

130 i

7. How muc

the to

into s

8. Explai

conduct

9. Is wate

what h

10. Why is

steel

weather

molecules. What is the difference between them?

4. What is a convient way of finding the specific gravity of a liquid?

5. How much does the volume of 48 liters of water increase when heated from 10 deg C to 60 deg C? The coefficient of volume expansion of water is 0.00010/deg C.

6. How much heat is required to raise the temperature of750 grams of iron from 10 deg C to 130 deg C?

7. How much heat energy is required to raise the temperature of 10 grams of ice at 0 deg C into steam at 100 deg C?

8. Explain the methods of heat transfer by conduction, convection and radiation.

9. As water is cooled from 50 deg F to 32 deg F what happens to its density?

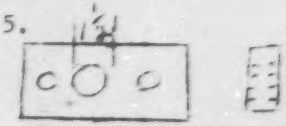
10. Why is it often necessary to leave a space between steel rails when building a railroad in cold weather?

cutter)

ing attachment)

n head of bolt

MATHEMATICS	C

LABORATORY	
Test 5. 	
Holding work by bolt and tee slot	
Drilling	
Select milling machine	
Select speed and feed	
Drill	
Bore	
Hold dimenison within given tolerance.	

TEACHING PROC

1. Exp
2. Dem
3. Dis
4. Pro
5. Lec

STUDENT ACTIV

1. Stu
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TEACHING PROCEDURES

1. Experimentation
2. Demonstration
3. Discussions
4. Problem solving
5. Lecture and clarification of terms

STUDENT ACTIVITIES

1. Student will define and give examples of elasticity, cohesion, adhesion, and surface tension of through experimentation and demonstrations.

MATHEMATICS	C

LABORATORY	
	2. Studen volum iron. 3. Studen and w 4. Studen condu water POST TEST

2. Student will solve problem to determine the volume and linear expansion of water and iron.

3. Student will calculate the specific heat of a metal and water.

4. Student will demonstrate heat transfer by conduction, convection, and radiation of water and iron.

POST TEST

SAMS

LABORATORY	
OBJECTIVES: SAWS	OBJECTIVES: SAWS
1. The student will be able to select the correct blade for sawing mild steel, tool steel, and aluminum.	1. To discu gravitat $\frac{W_1}{W_2}$
2. The student will be able to set proper speed and feed for sawing mild steel, tool steel and aluminum.	2. To find of objec equation a =
	3. To discu distance
	4. To const timing d
	5. To demon its rota
	OUTLINE OF CONTENT
	A. Circular
	B. Circular
	C. Circular
	D. Uniform

	SCIENCE
the correct eel, er speed and el	OBJECTIVES: SAMS 1. To discuss Newtons laws of universal gravitational attraction. $\frac{F_1}{F_2} = \frac{D_2^{-2}}{D_1}$ 2. To find by computation the speed of rotation of objects using the centripetal acceleration equation. $a = v^2/r$ 3. To discuss the relationship of velocity, time, distance and acceleration. 4. To construct a pendulum to be used as a timing device. 5. To demonstrate with a gyroscope the stability of its rotation. OUTLINE OF CONTENT A. Circular motion B. Circular motion and Centrifugal forces C. Circular Motion and friction D. Uniform Velocity and Uniform Acceleration

MATHEMATICS	SOW
OBJECTIVES: SAWS	OBJECTIVES: SAWS
A. The power saw	
1. Capacity of saw	
2. Selection of blade	
3. Method of requisition stock	
4. Sawing speed	
1.1 Dry sawing	
1.2 Wet sawing	

COMMUNICATIONS

OBJECTIVES: [illegible]

L A B O R A T O R Y

PRE AND POST TEST

1. What blade would you use to saw mild steel? What speed and feed?
2. What is the correct blade for sawing aluminum? What speed? Feed?
3. What pitch blade is used to saw tool steed? Speed? Feed?
4. Name three types of saw blades used on vertical sawing machines.

E. Perio

PRE AND POST TE

1. What
towar
the e
2. Expla
force
of mo
3. An ob
under
avera
What
(c) W
time?
4. How m
up eac
5. What t
centri
What i

E. Periodic Motion - The Pendulum

PRE AND POST TEST

1. What forces act upon a ball which is falling toward the earth? What forces is acting upon the earth?

2. Explain why centrifugal and centripetal forces are examples of Newton's third law of motion.

3. An object starts from rest and falls freely under the force of gravity, (a) What is its average velocity at the end of 5 sec.? (b) What is its average velocity during the fall? (c) What distance has it fallen during this time?

4. How much extra speed do falling bodies pick up each second?

5. What three factors determine the magnitude of the centripetal force acting on a rotating body?

6. What is universal gravitation?

LABORATORY	
	7. Give s trifug 8. What f of a p 9. A ball to the is swu cord w force string
	TEACHING PROCEDU 1. Discuss 2. Proble 3. Experim 4. Demons 5. Lecture

7. Give several examples of how we use centrifugal force to our advantage.

8. What factors determine the period of vibration of a pendulum?

9. A ball having a mass of 0.05 kg is attached to the end of a cord 1.5 meter long. The ball is swung in a circular path at the end of the cord with a velocity of 8 m/sec. What is the force in newtons which tends to break the string?

TEACHING PROCEDURES

1. Discussion
2. Problem solving
3. Experimentation
4. Demonstration
5. Lecture for clarification of terms

MATHEMATICS	C

	COMMUNICATIONS

LABORATORY	
	STUDENT ACTIVIT 1. Stude centr 2. Stude on th Galil 3. Stude devic POST TEST

STUDENT ACTIVITIES

1. Students will solve problems to determine the centrifugal force of rotating bodies.
2. Students will make reports (oral and written) on the scientific accomplishments of Galileo and Newton.
3. Student will construct an accurate timing device (pendulum).

POST TEST

THE SHAPER

THE SHAPER

LABORATORY	
OBJECTIVES: THE SHAPER 1. The student will set up work on the shaper and perform the operations needed to make serrations on a steel plate.	OBJECTIVES: THE S 1. To discu on an au 2. To illus force pe piston i piston. 3. To make measurem 4. To discu and Boyl gaseous 5. To demon across t By blowi of paper 6. To discu applicati 7. To demons ing wate

	SCIENCE
aper and	OBJECTIVES. THE SHAPER 1. To discuss the operation of hydraulic brakes on an automobile. 2. To illustrate on blackboard facts that the force per unit area (pressure) on the small piston is the same as that on the large piston. 3. To make a simple barometer and demonstrate the measurement of atmospheric pressure. 4. To discuss the difference between Charles' and Boyle's laws with reference to compressed gaseous pressure. 5. To demonstrate Bernoulli's principle by blowing across the upper surface of a sheet of paper. By blowing against the underside of a sheet of paper. 6. To discuss the automobile carburator as an application of Bernoulli's principle. 7. To demonstrate Bernoulli's principle by flowing water through a tube with different diameters.

MATHEMATICS	C
OBJECTIVES: THE SHAPER	OBJECTIVES: THE S
A. Determing the length of the cutting stroke	8 out of 10 st
B. Calculating the cutting speed	correctly all
1. Converting fpm to strokes per minute	
1.1 Mathematical calculation	
1.2 Tables	
C. Indexing	
1. Review and continuation of milling machine indexing	
D. Dovetails	
1. Measuring angles with the protractor	
2. More right triangle trigonometry	

	COMMUNICATIONS
troke	OBJECTIVES: THE SHAPER 8 out of 10 students will be able to spell correctly all of the words in the list given.
ute	
ling	
tor	

LABORATORY

PRE ANDPOST TEST

1. Name the three types of shapers.
2. Make a plate ½" x 1" x 3" and cut serrations on one side as per drawing.

OUTLINE OF CONTEN

A. Hydraul

B. Pressur

C. Pascal'

D. Applica

1. Pre

2. Liq

E. Boyle's

1. Com

2. Pre

F. Bernoul

G. Applica

PRE AND POST TEST

1. State th

a. Pasc

b. Boyl

c. Char

d. Bern

OUTLINE OF CONTENT

A. Hydraulic brakes

B. Pressure applied to liquids

C. Pascal's Law

D. Applications of Pascal's law

1. Pressure on liquids

2. Liquids transmit pressure

E. Boyle's Law

1. Compressed gases exert pressure

2. Pressure and gas volume

F. Bernoulli's Principle

G. Applications of Bernoulli's principle

PRE AND POST TEST

1. State the following and give an example of each:

a. Pascal's law

b. Boyle's law

c. Charles' law

e. Bernoulli's principle

errations

MATHEMATICS	CO

LABORATORY	
	2. In th an ar of 80 to th 2400
	3. When in^2 i what is co
	4. How c press pisto
	5. Does gases
	6. Is th gasol with
	TEACHING PROCEDU
	1. Discus
	96 2. Illust

2. In the hydraulic press, the small piston has an area of 0.5 in square and the larger one of 80 in square. What force must be applied to the small piston to balance a force of 2400 lbs. acting on the larger one?

3. When 300 in^3 of a gas under a pressure of 15 lb/in^2 is compressed to a volume of 20 in^3, what will be its new pressure? The temperature is constant.

4. How can a small force on one piston of a hydraulic press produce such a large force on the other piston?

5. Does Boyle's law apply to liquids as well as gases?

6. Is the pressure at the bottom of a tank filled with gasoline as great as if the tank were filled with water? Why?

TEACHING PROCEDURES

1. Discussion

2. Illustrations

	COMMUNICATIONS

LABORATORY	
	3. Demonst 4. Problem 5. Lecturi STUDENT ACTIVITIE 1. Student Boyle's 2. Student use. 3. Student princi 4. Student amount POST TEST

3. Demonstration

4. Problem solving

5. Lecturing for clarification of terms

STUDENT ACTIVITIES

1. Student will define Pascal's, Charles', Boyle's laws, and Bernoulli's principle.

2. Student will make barometers and explain their use.

3. Student will demonstrate and explain Bernoulli's principle as applied to an airplane lift.

4. Student will solve problems to determine the amount of pressure applied to liquids and gases.

POST TEST

CHARACTERISTICS OF METALS

CHARACTERISTICS OF METALS

L A B O R A T O R Y	
OBJECTIVES: CHARACTERISTICS OF METALS 1. The student shall harden temper and test hardness of tool steel. 2. He shall be able to identify five different metals from six samples.	OBJECTIVES: CHARA 1. To displ magnetit etc) in powder. 2. To indic metals. 3. To calcu iron, al 4. To indic heating of lead 5. To demon exposing moisture 6. To coat of copp 7. To demon Cu, ste 100 8. To demon

st

erent

SCIENCE

OBJECTIVES: CHARACTERISTICS OF METALS

1. To display samples of metals (hematite, magnetite, steel, aluminum, zinc, copper, tin, etc) in form of sheets, wires, rods, and powder.
2. To indicate the different physical properties of metals.
3. To calculate the density of metals (copper, tin, iron, aluminum).
4. To indicate the low melting point of tin by heating in direct flame. To show the softness of lead by cutting it with a dull knife.
5. To demonstrate oxidation of some metals by exposing metallic tin and iron to oxygen and moisture.
6. To coat carbon with copper by experimentation of copper plating with an electric current.
7. To demonstrate the reactions of Zn, Sn, Al, and Cu, steel with strong acids and strong bases.

100

8. To demonstrate the flame test on Zn, Sn, Al, and Cu.

OBJECTIVES: CHARACTERISTICS OF METALS

A. Ferrous alloys

1. Percent

2. Points of carbon converted to percent

3. Heat treatment

3.1 Time requirements for depth of penetration

B. Non-ferrous alloys

1. Percent of composition

OBJECTIVES. CHARACT

	COMMUNICATIONS
cent of	OBJECTIVES. CHARACTERISTICS OF METALS

LABORATORY

3. To demon
roller b

OUTLINE OF CONTENT

A. Basic pr
1. Tens
2. Duct
3. Hard
4. Mall
5. Elas

B. General

C. Alloy st

D. Stainles

E. Temperin

F. Metal pl

G. Anti-fri
1. Poli
2. Ball
3. Lubr

3. To demonstrate the reduction of friction with roller bearings, ball bearings, and lubricants.

OUTLINE OF CONTENT

A. Basic properties of metals

1. Tensile strength

2. Ductility

3. Hardness

4. Malleability

5. Elasticity

B. General properties of alloys

C. Alloy steel

D. Stainless steel

E. Tempering Affects of metals

F. Metal plating

G. Anti-friction metals

1. Polished bearings

2. Ball bearings and roller bearings

3. Lubricants

MATHEMATICS	C

L A B O R A T O R Y

PRE AND POST TEST

1. To what temperature must steel be brought in order to get full hardness?
2. What is the second step in hardening steel?
3. What four methods are used to test the hardness of hardened steel?
4. Name four quenches used to cool steel during heat treating and give one advantage over one of the others.
5. What determines the temperature at which carbon steel is brought too before quenching?
6. Which has the greater amount of carbon - cast iron or steel?
7. What happens to cast iron if heated and quenched?
8. List the steps taken in which the harden and temper a piece of 1085 carbon steel. Carry this out and test for hardness before and after tempering on the "Rockwell" hardness testers. You will be graded on correct of steps and the results of the metal.

PRE AND POST TES

1. What p
hammer
2. What f
3. Name a
be obt
4. The ab
stretc
5. An all
a. br
b. st
c. br
d. ar
e. he
6. Why ar
7. What m
8. Name a
steel.
9. What
make f

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g steel?

the

el

which

quenching?

bon - cast

and

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. Carry

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rect of steps

PRE AND POST TEST

1. What property of a metal enables it to be hammered or rolled into sheets?
2. What is the heat treatment of steel?
3. Name and explain two processes in which metals can be obtained from their ores.
4. The ability of a metal to withstand a stretching force is called its _____.
5. An alloy of copper and zinc is
   a. bronze
   b. steel
   c. brass
   d. an oxide
   e. hematite
6. Why are alloys often used instead of pure metals?
7. What metals are used to make solder?
8. Name at least five tools made from high-carbon steel.
9. What element is added to low-carbon steel to make it stainless?

LABORATORY	
	10. Draw a the sol Indicat net res TEACHING PROCEDUR 1. Demonst 2. Experim 3. Individ 4. Discuss 5. Lecture STUDENT ACTIVITIE 1. Student differe 2. Through results Al, and 3. Student metals 106 POST TEST

10. Draw a copper plating electric cell. Name the solution used. Correctly name the electrodes. Indicate the flow of electrons. Give half and net reactions that take place in this cell.

TEACHING PROCEDURES

1. Demonstrations
2. Experimentation
3. Individual projects
4. Discussions
5. Lecture for clarification of terms.

STUDENT ACTIVITIES

1. Student will define physical properties of different types of steel, Fe, Zn, Cu, and Sn.
2. Through experimentation student will indicate the results of strong acids and bases on Zn, Pb, Sn, Al, and Cu.
3. Student will experiment with electroplating of metals and the oxidation of metals.

106

POST TEST

UNIT 1

MACHINE TECHNOLOGY

UNIT 1

MACHINE TECHNOLOGY

LABORATORY	
UNIT 1 MACHINE TECHNOLOGY	UNIT 1 MACHINE TEC
ORIENTATION	ORIENTATION
A. Class organization	A. Class org
1. Make clean up assignments.	1. Proce labor
2. Safety dress and rules.	2. Obser
3. Procedures for checking out tools and using machines.	3. Forma
B. Introduction to shop and the machines in the shop.	B. Introduct
1. Drill presses	1. Lever
2. Lathes	2. Pulle
3. Milling machines	3. Wheel
4. Power saws	4. Incli
5. Shaper	5. Screw
6. Gear Shaper	6. Wedge
7. Rockwell Hardness Tester	
8. Grinders	
9. Welding machines	

	SCIENCE
	UNIT 1 MACHINE TECHNOLOGY
	ORIENTATION A. Class organization 1. Procedures and uses of basic tools in laboratory. 2. Observation of safety precautions. 3. Format for laboratory report. B. Introduction to simple machinery 1. Lever 2. Pulley 3. Wheel and Axle 4. Incline Plane 5. Screw 6. Wedge
nd using	
in the	

MATHEMATICS

UNIT 1 MACHINE TECHNOLOGY

ORIENTATION

1. Class organization.
2. General outline of course.
3. Simple machines and their formula.
   - 3.1 The lever
   - 3.2 The inclined plane
   - 3.3 The wheel and axle
   - 3.4 The pulley
   - 3.5 The wedge
   - 3.6 The screw

UNIT 1 MACHINE TECHN

ORIENTATION

A. Spelling w
tools.

1. Lever
2. Inclin
3. Axle
4. Wheel
5. Pulley
6. Wedge
7. Screw
8. Transf
9. Effici
10. Energy
11. Potent
12. Fricti
13. Machin
14. Lathe
15. Techno
16. Simple

	COMMUNICATIONS
	UNIT 1 MACHINE TECHNOLOGY
	ORIENTATION

A. Spelling words connected with machinery and tools.

1. Lever
2. Inclined plane
3. Axle
4. Wheel
5. Pulley
6. Wedge
7. Screw
8. Transform and transfer (energy)
9. Efficiency
10. Energy
11. Potential
12. Friction
13. Machinery
14. Lathe
15. Technology
16. Simple, conpound, and complex machines

LABORATORY

17. Mat
18. Mil
19. Sha
20. Smo
21. Cha
22. Chi
23. Scr
24. Pri
25. Com
26. Tra
27. Bal
28. Fil

B. Reading f

C. Use of re

1. Dicti
2. Encyc
3. Reade

D. Giving an

	COMMUNICATIONS
	17. Material 18. Milling machine 19. Shaper 20. Smooth 21. Characteristic 22. Chisel 23. Scriber 24. Prick punch 25. Combination square 26. Trammels 27. Ball peen (hammer) 28. Fillister B. Reading for the main idea C. Use of reference materials 1. Dictionary 2. Encyclopedia 3. Readers' Guide D. Giving and following oral and written directions.

UNIT 2

MEASUREMENT

UNIT 2

MEASUREMENT

LABORATORY	
UNIT 2 MEASUREMENT	UNIT 2 MEASUREMEN
ORIENTATION A. Reading six inch steel rule. B. Reading micrometer. C. Reading verneer scale.	ORIENTATION A. Linear M 1. Volu 2. Dist 3. Perc B. Metric S 1. Hist 2. Engl 3. Prop a. 4. Syst 5. Conv 6. Meas C. Density D. Specific E. Viscosit

UNIT 2 MEASUREMENT

ORIENTATION

A. Linear Measurements

1. Volume

2. Distance

3. Percentage of error

B. Metric System (class requirement)

1. History of measurement

2. English system of measurement

3. Properties and measurement of matter

a. Volume, mass, and weight

4. Systems of measurements

5. Conversion in measurements

6. Measurement of temperature

C. Density

D. Specific gravity

E. Viscosity

MATHEMATICS	
UNIT 2 MEASUREMENT	UNIT 2 MEASUREMENT
ORIENTATION	ORIENTATION
A. Ruler measurements	A. Spelling
1. Common ruler fractions	1. Micro
1.1 Addition	2. Scale
1.2 Subtraction	3. Fract
1.3 Multiplication	4. Decim
1.4 Division	5. Meter
2. Measurements with the steel scale	6. Decim
2.1 Cumulative error	7. Centi
3. Decimal fractions	8. Milli
3.1 Addition	9. Kilom
3.2 Subtraction	10. Gram
3.3 Multiplication	11. Liter
3.4 Division	12. Radiu
3.5 Rounding off decimals	13. Diame
4. Decimal equivalents	14. Circu
4.1 Changing a fraction to a decimal	15. Verni
4.2 Changing a decimal to a fraction	16. Calip
4.3 Measurements of decimal fractions with	

	COMMUNICATIONS
	UNIT 2 MEASUREMENT
	ORIENTATION A. Spelling words 1. Micrometer 2. Scale 3. Fraction 4. Decimal 5. Meter 6. Decimeter 7. Centimeter 8. Millimeter 9. Kilometer 10. Gram 11. Liter 12. Radius 13. Diameter 14. Circumference 15. Vernier 16. Calipher

al

on

ons with

the steel scale

5. Percent

5.1 Percent error in measurement

6. The circle and its measurements

6.1 Radius

6.2 Diameter

6.3 Chord

6.4 Circumference

6.5 Area

B. Angular measurement

1. The protractor

2. The degree, minute, and second

3. The mil

C. Auxiliary measuring devises and their use

1. Vernier calipers

2. The micrometer

3. Outside calipers

4. Inside calipers

5. Hermaphrodite calipers

6. Dividers

B. Vocabula

1. Pref

2. Suff

C. The stor

D. Individu
the univ

	COMMUNICATIONS
	B. Vocabulary 1. Prefixes connected with measurement 2. Suffixes connected with measurement C. The story of measurement D. Individual responsibility - our place in the universe

UNIT 3

INTERPRETATION OF DRAWING AND SYMBOLS

UNIT 3

NTERPRETATION OF DRAWING AND SYMBOLS

LABORATORY	
UNIT 3 INTERPRETATION OF DRAWING AND SYMBOLS	UNIT 3 INTERPRET
ORIENTATION	ORIENTATION
A. Shop drawing	A. Choosin
1. Lines used	1. Flo
2. Three view drawings	2. Int sca
3. Two view drawings	3. Cor
4. One view drawing	4. Sym
5. Auxiliary view	
6. Isometric drawings	
7. Tolerances - upper and lower limit	
8. Shop sketches	
9. Symbols used on drawings	

	SCIENCE
S	UNIT 3 INTERPRETATION OF DRAWINGS AND SYMBOLS
	ORIENTATION A. Choosing Scales 1. Floor plan of the Physical Science Laboratory 2. Interpretation of sizes and distances from scale drawings. 3. Converting actual lengths to scales. 4. Symbols readings and equivalents.
imit	

MATHEMATICS	
UNIT 3 INTERPRETATION OF DRAWINGS AND SYMBOLS	UNIT 3 INTERPRETATI
ORIENTATION	ORIENTATION
A. Ratio and proportion	A. Spelling
B. Sketching	1. Auxil
C. Dimensioning	2. Isome
1. Finding missing dimensions	3. Dimen
2. Limit system of dimensioning (tolerance)	4. Toler
D. Symbols	5. Sketc
E. Charts	B. The bluep
	C. Words as
	D. Symbolism
	1. Polit
	2. Other
	E. Symbolism

	COMMUNICATIONS
	UNIT 3 INTERPRETATION OF DRAWINGS AND SYMBOLS
rance)	ORIENTATION A. Spelling words 1. Auxiliary 2. Isometric 3. Dimension 4. Tolerance 5. Sketch B. The blueprint as a communication device C. Words as symbols D. Symbolism in our lives 1. Political cartoons 2. Other commonly used symbols E. Symbolism in literature

UNIT 4

DRILLING

UNIT 4

DRILLING

LABORATORY	
UNIT 4 DRILLING	UNIT 4 DRILLIN
ORIENTATION	ORIENTATION
A. Drill presses	A. Applic
1. Sensitive drill press	1. L
2. Upright drill press	2. P
3. Radial drill press	B. Mecha
4. Gang drill press	1. I
5. Multiplicable spindle drill press	2. W
B. Drilling machines	C. Gener
C. Drill bits	1. F
1. Twist drills	2. M
2. Core drill	3. F
3. Flat drills	
4. Star drills	
D. Electric drill - (hand or portable)	
1. Safety in use of.	
E. Grinding drills	

	SCIENCE
	UNIT 4 DRILLING
	ORIENTATION A. Application of some simple machines 1. Lever 2. Pulley B. Mechanical Advantage 1. Input and output of machines 2. What is efficiency? C. General principles of machines 1. Force 2. Motion 3. Friction

press

le)

MATHEMATICS	
UNIT 4 THE DRILL PRESS	UNIT 4 THE DRILL P
ORIENTATION	ORIENTATION
A. Geometry of the circle	A. Spelling
B. The lever and its applications	1. Sensi
C. The pulley and its applications	2. Radia
D. Taps and tap drill sizes	3. Web
1. Calculation	4. Flute
2. Chart	5. Tang
E. Cutting speeds	6. Drift
1. Change fpm to rpm	7. Count
1.1 Calculation	8. Count
1.2 Chart	
F. Reaming	
1. Caluculation of drill size	
G. Spotfacing	
1. Calculation of diameter to spotface	
H. Countersinking	
1. Calculation of depth to countersink	

	COMMUNICATIONS
	UNIT 4 THE DRILL PRESS
	ORIENTATION A. Spelling words 1. Sensitive 2. Radial 3. Web 4. Flute 5. Tang 6. Drift 7. Counterbore 8. Countersink

UNIT 5

LATHES

UNIT 5

LATHES

LABORATORY	
UNIT 5 LATHES	UNIT 5 LATHES
ORIENTATION	ORIENTATION
A. Types of lathes	A. The sc
1. Bench or speed	1. Me
2. Engine lathe	B. Force
3. Gearhead lathe	1. Me
4. Gap lathe	C. Motion
5. Turret lathe	D. Frictio
B. Nomenclature of bend lathe	1. Th
C. Care and maintenance	E. Newton
1. Oil daily	1. Ne
2. Keep clean	a.
3. Attachments should screw or spindle by hand	2. Ne
	a.
4. Keep belt free of oil	3. Ne
D. Lathe operations	a.
1. Straight turning	
2. Facing	
3. Turning tapers	
a. Tailstock set over method	

	SCIENCE
	UNIT 5 LATHES
	ORIENTATION A. The scientific meaning of work 1. Measurement of work B. Force 1. Measurement of force C. Motion and velocity D. Friction 1. The coefficient of friction E. Newton's Laws of Motion 1. Newton's first law of motion a. Inertia 2. Newton's second law of motion a. units of force and mass 3. Newton's third law of motion a. application of Newton's third law of motion
spindle	

MATHEMATICS	
UNIT 5 THE LATHE	UNIT 5 THE LATHE

ORIENTATION

A. Computing spindle speeds

1. Ratio and proportion

1.1 with pulleys

1.2 with gears

B. Calculating feeds and speeds

1. Charts

2. Formulae

2.1 Converting fpm to rpm

C. Center drilling

1. Locating the center of a circle

1.1 Mathematical methods

1.2 Mechanical methods

2. Testing centers

3. Selecting the center drill

3.1 Measuring the diameter

3.2 Calculation

3.3 Chart

ORIENTATION

A. Spelling

1. Carri

2. Spind

3. Knob

4. Saddl

5. Knurl

6. Threa

7. Strai

8. Chuck

9. Colle

10. Mandr

11. Mecha

12. Align

13. Longi

14. Tumbl

15. Acme

16. Herma

	COMMUNICATIONS
	UNIT 5 THE LATHE
	ORIENTATION A. Spelling words 1. Carriage 2. Spindle 3. Knob 4. Saddle 5. Knurl 6. Thread 7. Straight 8. Chuck 9. Collet 10. Mandrel 11. Mechanism 12. Alignment 13. Longitudinal 14. Tumbler 15. Acme thread 16. Hermaphrodite caliper

LABORATORY	
b. Taper attachment	
c. Compound rest method	
4. Boring	
5. Drilling	
6. Reaming	
7. Recessing	
8. Undercutting	
9. Taping	
10. Knurling	
14. Threading	
a. external	
b. internal	
12. Radius turning	
E. Hold work in the lathe	
1. Chuckes	
a. Independent chuck (ways of turing work)	
b. Universal chuck	
c. Drill chuck	
2. Collets	
3. Face plate	

of turing work)

MATHEMATICS	
D. Rough and finish turning	17. Cylind
1. Calculating and measuring rough turned diameters	18. Transv
2. Use of the cross-feed to finish turn	19. Rotati
2.1 Limits	20. Safety
2.2 Calculating graduations for adjusting cross feed	21. Rough
E. Facing	22. Decima
1. Cutting speeds for facing	23. Anvil
2. Facing to length	24. Angle
2.1 The hook rule	25. Machin
F. Undercutting and recessing	26. Shoulde
1. Calculating depth of undercut	27. Fillet
2. Calculating cross-feed graduations	28. Swivel
G. Shoulder turning	29. Protrac
1. Use of the radius gage	30. Univer
H. Knurling	31. Standa
1. Calculating rpm of work	32. Coarse
I. Filing and polishing	33. Pitch
1. Calculating spindle speeds	34. Lubric
	35. Transv

	COMMUNICATIONS
	17. Cylindrical
ned	18. Transverse
	19. Rotation
n	20. Safety
	21. Rough
justing	22. Decimal - equivalent table
	23. Anvil
	24. Angle
	25. Machinist
	26. Shoulder
	27. Fillet
	28. Swivel
	29. Protractor
	30. Universal
	31. Standard
	32. Coarse
	33. Pitch
	34. Lubricant
	35. Transversity

LABORATORY	
4. Carriage	
5. Centers and dog	
6. Mandrel	
F. Speeds and feeds	
1. rpm	
2. ft. per. minute	
G. Lathe alignment	
1. Matching center	
2. Matching line on end of tailstock	
3. Trial cut method	
4. Dial indicator with test bar	
H. Grinding tool bits	
1. Threading tool	
2. Straight turning tool-(left and right)	
3. Round nose tool	
4. Facing tool-(left and right)	
5. Chip braker	
I. Using the follower rest	
J. Using the steady rest	

	SCIENCE
tock	
nd right)	

MATHEMATICS	
J. Drilling and reaming	B. Research
1. Converting diameter of reamed holes to drill sizes.	lathe or
1.1 Chart	
2. Cutting speed for reaming	
K. Turning and boring tapers	
1. Taper per inch	
2. Offset method	
2.1 The pythagorean theorem	
3. Taper attachment	
3.1 Right triangle trigonometry	
3.2 The protractor	
L. Cutting screw threads	
1. Terminology	
1.1 Internal and external threads	
1.2 Major diameter and its calculation	
1.3 Minor diameter and its calculation	
1.4 Pitch diameter and its calculation	
1.5 Lead...	
1.6 Lead angle...	129

	COMMUNICATIONS
les to	B. Research paper on some subject connected with lathe or machine technology.
ls	
ulation	
ulation	
ulation	

MATHEMATICS	
1.7 Crest...	
1.8 Root...	
1.9 Depth...	
1.10 Limits o size..	
1.11 Tolerance	
1.12 Allowance...	
1.13 Basic size...	
1.14 Nominal size...	
1.15 Truncation...	
1.16 Depth of engagement	
2. Formulae for the unified thread	
2.1 Thread tables	
3. The quick change gear box	
4. Use of the screw thread tool gauge and the center gauge	
5. Computing the depth of infeed	
6. Multiple threads	
7. Methods and instruments for measuring threads	
7.1 The thread pitch gauge	
7.2 The ring thread gauge	131

ge and the

aring threads

7.3 Thread micrometer

7.4 Thread plug gauge

7.5 The three wire method

UNIT 6

MILLING MACHINE

UNIT 6

MILLING MACHINE

LABORATORY	
UNIT 6 MILLING MACHINE	UNIT 6 MILLING
ORIENTATION	ORIENTATION
A. Types of milling machines	A. Machin
1. Plain	B. Energy
2. Universal	1. La
3. Vertical	C. Kineti
4. Combinations of either two of the three above.	1. En
	a.
B. Nomenclature of milling machine.	D. Heat e
C. Care and maintenance	1. Co
1. Oil daily	2. Sp
2. Keep clean	3. He
D. Methods for holding work	
1. Vise	
2. Fixtures	
3. Clamps	
4. Indexing attachment	
5. Rotary table	
6. Bolts and Tee slot on table	

UNIT 6 MILLING MACHINE

of the three

ORIENTATION

A. Machine in relation with energy

B. Energy

1. Law of conservation of energy

C. Kinetic and potential energies

1. Energy used to overcome friction

a. Mechanical energy

D. Heat energy

1. Coefficient of linear expansion

2. Specific heat

3. Heat of fusion

UNIT 6 THE MILLING MACHINE

ORIENTATION

A. Speeds and feeds for milling

1. Calculation

2. Charts

B. Side milling square and hex heads on bolts

1. Calculating diameter of stock to mill flats

C. Straddle milling

1. Selecting cutters and spacers

2. Calculating distance to move table

D. Computing and gauging key seats

E. Indexing

1. Circular measurement in degrees, minutes, and seconds

2. Indexing for gear cutting

F. Helical milling

1. The helix and the spiral

1.1 The helix angle

1.2 The helix lead

UNIT 6 THE MILLING M

ORIENTATION

Spelling words

1. Column
2. Knee
3. Vertic
4. Horizo
5. Arbor
6. Chatte
7. Coolan
8. Helica
9. Stagge
10. Periph
11. Stradd
12. Slitti
13. Angula
14. Convex
15. Concav
16. Woodru

	COMMUNICATIONS
	UNIT 6 THE MILLING MACHINE
	ORIENTATION
	Spelling words
	1. Column
	2. Knee
bolts	3. Vertical
mill	4. Horizontal
	5. Arbor
	6. Chatter
	7. Coolant
le	8. Helical
	9. Staggered tooth cutter
	10. Periphery
minutes,	11. Straddle
	12. Slitting
	13. Angular
	14. Convex
	15. Concave
	16. Woodruff

LABORATORY	
E. Methods for holding cutters	
1. Arbor	
2. Collets	
3. Bolt direct to spindle	
F. Milling operations	
1. Plain milling	
2. Slide milling	
3. Straddle milling	
4. Boring	
5. Drilling	
6. Reaming	
7. Key way milling	
8. Form milling	
9. Gang milling	
10. Face milling	
11. Index milling	
G. Milling cutters	
1. Plain milling cutters	
a. straight tooth	
b. helical tooth	

2. The trigonometry of the right triangle

3. Gearing the milling machine to cut a helix

3.1 Ratio and proportion

G. Gear cutting

1. Gear-tooth notation and formulae

1.1 The involute curve

1.2 Depth of tooth

1.3 Gauging gear teeth

17. Shaf

18. Inde

19. Helí

20. Herr

21. Spur

22. Mesh

23. Dede

24. Diam

25. Chor

26. Invo

	COMMUNICATIONS
e	17. Shaft
	18. Index
	19. Helix
	20. Herringbone
	21. Spur
	22. Mesh
	23. Dedendum
	24. Diametral
	25. Chordal
	26. Involute

LABORATORY	
2. Side cutters	
a. half side	
b. plain side cutters	
c. stagger tooth cutters	
3. Face mill cutters	
4. End mill cutters	
5. Angle cutters	
6. Form cutters	
H. Milling attachment	
1. Indexing attachment	
2. Rotary indexing attachment	
3. Slotting attachment	
4. Vertical head (used on horizontal miller)	

ntal miller)

UNIT 7

SAWS

UNIT 7

SAWS

LABORATORY	
UNIT 7 SAWS	UNIT 7 SAWS
ORIENTATION	ORIENTATION
A. Types of power saw	A. Circ
1. Metal cutting band saws	1.
a. upright or vertical	B. Circ
b. horizontal	1.
2. reciprocating power saws	C. Circ
B. Nomenclature	
C. Maintenance and lubrication	
D. Types of blades and uses	
E. Cutting speeds and feeds	
F. Contour sawing	
G. Coolants	
H. Friction sawing	

UNIT 7 SAWS

ORIENTATION

A. Circular motion

1. Universal gravitation

B. Circular motion and centrifugal forces

1. Uniform circular motion

C. Circular motion and friction

UNIT 7 SAWING

ORIENTATION

A. The power saw

1. Capacity of saw

2. Selection of blade

3. Method of requisition stock

4. Sawing speed

1.1 Dry sawing

1.2 Wet sawing

UNIT 7 SAWING

ORIENTATION

	COMMUNICATIONS
	UNIT 7 SAWING
	ORIENTATION

UNIT 8

SHAPER

UNIT 8

SHAPER

LABORATORY	
UNIT 8 SHAPER	UNIT 8 SHAPER
ORIENTATION	ORIENTATION
A. Types	A. Hydrau
1. Crank	B. Pressu
2. Hydraulic	1. Pa
3. Fellows gear shaper	C. Applic
B. Nomenclature	
C. Maintenance and lubrication	
D. Controlling movements of rain and tool head	
E. Methods of setting up and securing work	
1. Center	
2. Vise	
3. Bolts and clamps	
F. Speeds and feeds	
G. Grinding cutting tools	
H. Exercises or operations	
1. Horizontal shaping	
2. Vertical shaping	
3. Angular shaping	
4. Internal and external key ways	

UNIT 8 SHAPER

ORIENTATION

A. Hydraulic press

B. Pressure applied to liquids

1. Pascal's Law

C. Application of Pascal's Law

d tool head

ng work

MATHEMATICS	
UNIT 8 THE SHAPER	UNIT 8 THE SHAPER
ORIENTATION	ORIENTATION
A. Determining the length of the cutting stroke	A. Spelling w
B. Calculating the cutting speed	1. Hydrau
1. Converting fpm to strokes per minute	2. Crank
1.1 Mathematical calculation	3. Recipr
1.2 Tables	4. Clappe
C. Indexing	5. Crossr
1. Review and continuation of milling machine indexing	6. Parall
D. Dovetails	7. Vise
1. Measuring angles with the protractor	8. Accura
2. More right triangle trigonometry	9. Doveta
	10. Radial

UNIT 8 THE SHAPER

ute

g

tor

ORIENTATION

A. Spelling words

1. Hydraulic
2. Crank
3. Reciprocating
4. Clapper box
5. Crossrail
6. Parallel
7. Vise
8. Accurate
9. Dovetail
10. Radial

UNIT 9

CHARACTERISTICS OF METALS

UNIT 9

CHARACTERISTICS OF METALS

LABORATORY	
UNIT 9 CHARACTERISTICS OF METALS	UNIT 9 CHARACTERIS
ORIENTATION	ORIENTATION
A. Heat treating	A. Basic pro
1. Furnaces	1. Tensi
2. Hardening	2. Ducti
3. Tempering	3. Hardn
4. Quenching	4. Malle
5. Annealing	5. Elast
6. Case hardening	B. General p
7. Normalizing	C. Alloy ste
8. Forging chisel	a. stain
B. Test hardness of metal	D. Tempering
1. File	E. Metal pla
2. Rockwell hardness tester	F. Anti-fric
3. Brinell hardness tester	1. Polis
4. Victor hardness tester	2. Ball
C. Metal identification	3. Lubri
D. Machinability	
E. Ferrous metals	

UNIT 9 CHARACTERISTICS OF METALS

ORIENTATION

A. Basic properties of metals

1. Tensile strength

2. Ductility

3. Hardness

4. Malleability

5. Elasticity

B. General properties of alloys

C. Alloy steel

a. stainless steel

D. Tempering affects of metals

E. Metal plating

F. Anti-friction metals

1. Polished bearings

2. Ball bearings or roller bearings

3. Lubricants

MATHEMATICS	
UNIT 9 CHARACTERISTICS OF METALS	UNIT 9 CHARACTERIST
ORIENTATION	ORIENTATION
A. Ferrous alloys	
1. Percent	
2. Points of carbon converted to percent	
3. Heat treatment	
3.1 Time requirements for depth of penetration	
B. Non-ferrous alloys	
1. Percent of composition	

UNIT 9 CHARACTERISTICS OF METALS

ORIENTATION

ercent

h of

LABORATORY	
F. Non-ferrous metals 1. Aluminum 2. Brass 3. Copper	

ACCESSION NUMBER: VT102209

PUBLICATION DATE: JUN71

TITLE: THE CHESTERFIELD HIGH SCHOOL VOCATIONAL INTERDISCIPLINARY PROGRAM.

DESCRIPTOR: *GRADE 11; HIGH SCHOOLS; *INTERDISCIPLINARY APPROACH; *CURRICULUM GUIDES; *TRADE AND INDUSTRIAL EDUCATION; ELECTRICAL OCCUPATIONS; *ELECTRONICS

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 85P.; RELATED DOCUMENTS VT 102 208 THROUGH VT 102 210 IN THIS ISSUE.

ABSTRACT: THIS DOCUMENT CONTAINS 10 UNITS FOR A GRADE 11 PROGRAM IN ELECTRONICS. THE UNITS ARE ORGANIZED UNDER THE FOUR HEADINGS OF LABORATORY, SCIENCE, MATHEMATICS, AND COMMUNICATIONS. EACH UNIT CONTAINS OBJECTIVES, PRETEST AND POSTTEST MATERIALS, CONTENT, METHODOLOGY, AND STUDENT LEARNING ACTIVITIES. THE UNIT TOPICS ARE ORIENTATION, HAND TOOLS AND SOLDERING, MEASUREMENT OF ELECTRICITY, SOURCES OF ELECTRICITY, MAGNETISM, TRANSFORMERS, ELECTRICAL CIRCUITS, INTRODUCTION TO BASIC ELECTRICAL COMPONENTS, AND ELECTRONIC CIRCUITS. EXTRA UNITS ON GRAMMAR AND USAGE AND APPLIANCE REPAIR ARE ALSO INCLUDED. SUPPLEMENTARY MATERIALS LISTED IN THE TABLE OF CONTENTS HAVE NOT BEEN INCLUDED WITH THE DOCUMENT. (LJ)

CONTRACT NUMBER: OEC-0-70-5190(361)

INSTITUTION NAME: CHESTERFIELD HIGH SCHOOL, S.C.

SPONSORING AGENCY NAME: BUREAU OF ADULT, VOCATIONAL, AND TECHNICAL EDUCATION (DHEW/OE), WASHINGTON, D.C. DIV. OF VOCATIONAL AND TECHNICAL EDUCATION.

VT 102 209

CHESTERFIELD HIGH

VOCATIONAL INTERDISCIPL

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June, 1971

VT 102 209

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IELD HIGH SCHOOL

TERDISCIPLINARY PROGRAM

Demonstration Programs
of
Vocational Education
in
South Carolina Region V
BAVTE/DVTE Project No. 0-361-0006
Contract No. OEC-0-70-5190(361)

The Chesterfield High School

Vocational Interdisciplinary Program

11th Grade

Team Members:

Dorothy S. Brew

Luther C. Marti

Jerry Daniel Ha

Stuart Thompson

The Chesterfield High School

cational Interdisciplinary Program

11th Grade

Team Members:

Dorothy S. Brewer - English

Luther C. Martin, Jr. - Mathematics

Jerry Daniel Hartley - Electronics

Stuart Thompson - Science

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General Objectives
of
Vocational Interdisciplinary Program
at
Chesterfield High School

1. The student will show a gain in knowledge by scoring higher on a post-test than did
2. The student will demonstrate improved attitude toward school and community by improve demonstrate ability to accept responsibility, follow directions, and make decisions.
3. Given common tools and equipment used in the electrical field, the student can demons by correct and safe use of such tools and equipment.
4. The student will demonstrate that he understands the interrelationship of subject dis gained in one subject to solve problems in other subjects.

Other Objectives Are:

1. To provide fundamental learning upon which specialization can be built.
2. To motivate those students who have shown little interest in school and who are worki
3. To reduce drop-out rate.
4. To provide the student with the necessary skills for employment upon graduation, whil preparing the students to continue their education at the college level.

General Objectives
of
ocational Interdisciplinary Program
at
Chesterfield High School

y scoring higher on a post-test than did on a pre-test.

de toward school and community by improved attendance at school;

, follow directions, and make decisions.

electrical field, the student can demonstrate manipulative skills

quipment.

tands the interrelationship of subject disciplines by using knowledge

other subjects.

specialization can be built.

ittle interest in school and who are working below their ability.

kills for employment upon graduation, while at the same time

ucation at the college level.

UNIT 1

ORIENTATION

UNIT 1

ORIENTATION

LABORATORY	
UNIT 1 ORIENTATION	UNIT 1 ORIENTATIO
OBJECTIVES:	OBJECTIVES:
1. To acquaint the student with the shop.	1. The students
2. To introduce the student with some of the basic equipment.	of atomic the
3. The student will be able to use the basic electrical tools safely.	2. The students of the concep bodies.
4. To familiarize the student with the possible job opportunities in the electricity-electronics field.	3. The students of electrosta
PRE-POST TEST	
To be determined for lab.	

	SCIENCE
	UNIT 1 ORIENTATION
asic lectrical e job s field.	OBJECTIVES: 1. The students will be able to demonstrate a knowledge of atomic theory. 2. The students will be able to demonstrate a knowledge of the concept of positively and negatively charged bodies. 3. The students will be able to demonstrate a knowledge of electrostatic attraction and repulsion.

MATHEMATICS	C
UNIT 1 ORIENTATION 6 Weeks	UNIT 1 ORIENTATION

OBJECTIVES:

1. Given variables or numbers, the student will demonstrate the laws of communitivity, associativity, and distributivity.
2. Given fractions with like and unlike denominators, students will add, subtract, multiply, divide.
3. Given common fractions, the student will give the equivalent decimal form and vice versa.
4. Given resistors of variable ohms and variable tolerance, the student should give the upper and lower limit of the resistor.

PRE-POST TEST

1. Demonstrate the commutative property of integers.
2. What property is used here: $a(b + c) = ab + ac$?
3. a) Mult.: $(-\frac{1}{2}) \times (-4)$ b) $(3/3) + (-1/3)$ divide
4. What is 22% of 64 ohms?
5. Express 2/5 as a decimal number.
6. Change .232 to a common fraction in simplest form
7. Compute 3.6% of 46.8.
8. What is the percent of tolerance in a 20 ohm resistor - 17 ohms - 23 ohms?

OBJECTIVES:

1. Pupils will be ab can be read easil
2. Pupils will demon
3. Pupils will be ab language.
4. Pupils will be ab concerning the la
5. Pupils will be ab words selected fr

demonstrate

d distributivity.

ators, students

e the equivalent

e tolerance,

limit of

gers.

ac?

ide

form

3

resistor -

COMMUNICATIONS

UNIT 1 ORIENTATION

OBJECTIVES:

1. Pupils will be able to prepare neat manuscripts that can be read easily.
2. Pupils will demonstrate ability by pre-tests.
3. Pupils will be able to communicate an idea using written language.
4. Pupils will be able to discuss some of the basic rules concerning the lab and the use of equipment.
5. Pupils will be able to spell and define technical words selected from this unit.

LABORATORY

CONTENT

1. General safety rules.
2. Safety in use of the meters and hand tools.
3. Rules of the lab.
4. Jobs in the electrical field.
5. Jobs in the electronic field.
6. Jobs after completion of college.
7. Starting your own business.

CONTENT

1. The nature
2. Molecules a
3. Electrons,
4. Law of char
5. Electrostat

s.

CONTENT

1. The nature of matter
2. Molecules and atoms
3. Electrons, protons, and neutrons
4. Law of charges
5. Electrostatic attraction and repulsion

MATHEMATICS	C O
9. a) add: $2\frac{1}{2} + 1\frac{1}{4} + 3/8$ b) add: $\frac{1}{4} + 2\ 3/5 + (-1\ 3/10)$.	
10. Subtract 2 1/3 from (-6 5/6).	
11. Combine: $(-\frac{1}{2}) - (+3/4) \times (+2)$.	
12. Combine: (-4.32) + (-.06) + (+.002).	
13. Subtract 36% of 400 from 52% of 650.	
14. Compute .5% of 30.	
15. Explain what is meant by $5 \pm 10\%$.	
CONTENT	CONTENT
1. Review integers.	1. Appearance and fo
2. Review operations with signed numbers.	2. Spelling
3. Fractions	3. Technical vocabul
4. Decimals	4. Discussions (clas
5. Decimal - Fraction Conversions	5. Selected technica
6. Percentages	6. Grammar and usage
	7. Testing

	COMMUNICATIONS
1 3/10).	
	CONTENT 1. Appearance and format of written work. 2. Spelling 3. Technical vocabulary 4. Discussions (class and group) 5. Selected technical readings and reports 6. Grammar and usage 7. Testing
5	

LABORATORY	
METHODOLOGY	METHODOLOGY
1. Class discussions	1. Lecture
2. Class hand-outs	2. Class discus
	3. Films
STUDENT LEARNING ACTIVITIES	STUDENT LEARNING
1. Reading hand-outs	1. Class discus
2. Class discussions	2. Films
POST TEST	POST TEST

METHODOLOGY

1. Lecture
2. Class discussion
3. Films

STUDENT LEARNING ACTIVITIES

1. Class discussion
2. Films

POST TEST

MATHEMATICS	C
METHODOLOGY	MEHTODOLOGY
1. Numerous examples at the blackboard	1. Class discussion
2. Filmstrips	2. Presentation of
3. Filmloops	3. Explanations
	4. Testing
	5. Written assignme
STUDENT LEARNING ACTIVITIES	STUDENT LEARNING ACT
1. Work examples at the blackboard.	1. Provide list of
2. Use of text.	2. Class discussion
3. Numerous examples for homework.	3. Provide selected
	4. Reports
	a. Oral
	b. Written
	5. Provide reading
POST TEST	POST TEST

COMMUNICATIONS

MEHTODOLOGY

1. Class discussions
2. Presentation of new course concept
3. Explanations
4. Testing
5. Written assignments

STUDENT LEARNING ACTIVITIES

1. Provide list of technical words to be spelled
2. Class discussions
3. Provide selected readings
4. Reports
   a. Oral
   b. Written
5. Provide reading periods

POST TEST

UNIT 2

HAND TOOLS AND SOLDERING

UNIT 2

HAND TOOLS AND SOLDERING

LABORATORY	
UNIT 2 HAND TOOLS AND SOLDERING	UNIT 2 HAND TOO
OBJECTIVES: 1. The student will be able to use the basic hand tools used in electricity - electronics. 2. The students will be able to choose the correct type of solder and apply it correctly. 3. The students will be able to choose the proper instrument for soldering a joint and the solder for that joint.	OBJECTIVES: 1. The student in the use 2. The student resistance 3. The student resistance
PRE-POST TEST A physical type test in which the student is required to solder some simple joints and do some simple wiring with the hand tools.	PRE-POST TEST

	SCIENCE
	UNIT 2 HAND TOOLS AND SOLDERING
ic hand tools used correct type of proper instrument r that joint.	OBJECTIVES: 1. The students will be able to demonstrate a proficiency in the use of Ohm's Law. 2. The students will be able to calculate the combined resistance of resistors in parallel. 3. The students will be able to calculate the combined resistance of resistors in series.
t is required to e wiring with the	PRE-POST TEST

M A T H E M A T I C S

UNIT 2 HAND TOOLS AND SOLDERING 3-4 Weeks

OBJECTIVES:

1. The student will be able to identify and manipulate basic symbols of algebra and electricity.
2. The student will be able to solve simple algebraic equations with one unknown.

PRE-POST TEST

1. What is a variable?
2. Solve for x: $2x + 4 = 12$
3. Convert the formula $A=lw$ so that you are solving for l.
4. Convert $A = 2l + 2w$ so that you are solving for w.
5. Explain why you can not answer as true or false: $2x > 6$.
6. What is the equation known as Ohm's Law?
7. Give the mathematics symbol for "not equal to".

UNIT 2 HAND TOOLS

OBJECTIVES:

1. Given technic from this uni define them.
2. Pupils will b hand tools us
3. Pupils will b in written re
4. Pupils will b

PRE-POST TEST

	COMMUNICATIONS
	UNIT 2 HAND TOOLS AND SOLDERING
	OBJECTIVES:
anipulate	1. Given technical and non-technical words selected from this unit, pupils will be able to spell and define them.
algebraic	2. Pupils will be able to make reports on the basic hand tools used in electricity - electronics.
	3. Pupils will be able to use good grammar and form in written reports on the different types of meters.
	4. Pupils will be able to use vocabulary of Ohm's Law.
	PRE-POST TEST
solving for l.	
ng for w.	
false:	
l to".	
10	

L A B O R A T O R Y

CONTENT

The use of:

1. Basic hand tools
    a. Pliers
    b. Screwdriver
    c. Cutters
    d. Soldering irons
    e. Solder
    f. Strippers
2. Splices
    a. T
    b. Rat-tail
    c. Western Union
3. Drills
    a. Wood

CONTENT

1. Ohm's Law
2. Parallel
3. Series ci
4. Combined

CONTENT

1. Ohm's Law
2. Parallel circuits
3. Series circuits
4. Combined circuits

M A T H E M A T I C S

8. Solve for x: $3x - 2 = 2x + 12$.

9. Solve for R: $E=IR$ where $E = 30$, $I = 5$.

10. True or false: $\frac{1}{2}x + 4 = \frac{x+4}{2}$

11. Solve for y: $x/2 + y/3 = 8$ where $x = 10$.

12. Give the Greek symbol for "alpha".

CONTENT

1. Symbols - Mathematical and Electrical
2. Solving basic algebraic equations
3. Ohm's Law.
4. Conversion of formulas

12

CONTENT

1. Technical an
2. Spelling (Ex
3. Grammar and
4. Scientific r
5. Technical re
6. Reports on i

	COMMUNICATIONS
0.	CONTENT 1. Technical and non-technical vocabulary 2. Spelling (Emphasis in all written assignments) 3. Grammar and usage 4. Scientific reports on related scientific reading 5. Technical research 6. Reports on interest areas of lab work.

LABORATORY	
b. Metal	
4. Conduit bender	
METHODOLOGY	MEHTODOLOGY
1. Demonstrations	1. Lecture
2. Class discussions	2. Discussio
3. Class practice with actual equipment	3. Handouts
STUDENT LEARNING ACTIVITIES	STUDENT LEARN
1. Class discussions	1. Class dis
2. Project using hand tools resulting in the use of the meters for testing this project. (ex. Hooking up a simple circuit and measuring the voltage, current, etc. associated with this project.)	2. Solving p
POST TEST	POST TEST

	SCIENCE
	MEHTODOLOGY 1. Lecture 2. Discussions 3. Handouts
	STUDENT LEARNING ACTIVITIES 1. Class discussions. 2. Solving problems.
ct.)	
	POST TEST
13	

MATHEMATICS	
METHODOLOGY 1. Blackboard 2. Filmstrips 3. Filmloops 4. Transparencies	METHODOLOGY 1. Discussions 2. Reports a. Oral b. Written 3. Tests 4. Assignments
STUDENT LEARNING ACTIVITIES 1. Working examples at blackboard 2. Research on Greek alphabet 3. Text 4. Homework	STUDENT LEARNING A 1. Provide pupil to meters and 2. Discussions 3. Reports - Ora 4. Provide readi
POST TEST	POST TEST

	COMMUNICATIONS
	METHODOLOGY 1. Discussions 2. Reports a. Oral b. Written 3. Tests 4. Assignments STUDENT LEARNING ACTIVITIES 1. Provide pupils with vocabulary list relating to meters and hand tools. 2. Discussions 3. Reports - Oral and Written 4. Provide reading periods POST TEST

UNIT 3

MEASUREMENT OF ELECTRICITY

UNIT 3

MEASUREMENT OF ELECTRICITY

LABORATORY	
UNIT 3 MEASUREMENT OF ELECTRICITY	UNIT 3 MEAS
OBJECTIVES: The student will be able to choose the correct meter to measure a given quantity and will be able to apply it correctly.	OBJECTIVES: 1. The stu of how are cor 2. The stu and how voltmet
PRE-POST TEST Various electrical measurements with the multimeter.	PRE-POST

	SCIENCE
	UNIT 3 MEASUREMENT OF ELECTRICITY
e correct meter to able to apply it	OBJECTIVES: 1. The students will be able to demonstrate a knowledge of how voltmeters, galvanometers, ampmeters and ohmmeters are constructed. 2. The students will be able to calculate the resistance and how connected to convert a galvanometer into a voltmeter or ammeter of the required size.
the	PRE-POST TEST

M A T H E M A T I C S

UNIT 3 MEASUREMENT OF ELECTRICITY (Meter Reading)

OBJECTIVES:

1. The student will understand the basic metric units and will relate the metric system to scientific notation.
2. Given scientific notation and a slide rule the student will multiply, divide, $\sqrt{}$, $\sqrt[3]{}$.

PRE-POST TEST

1. What does "milli" mean in fraction form?

UNIT 3 MEASUREMENT

OBJECTIVES:

1. Pupils will de
history of mea
questions.
2. Pupils will be
tific reading
to the develop
3. Pupils will be
Greek alphabet
Math.
4. Pupils will be
ed from this u
5. Pupils will de
prefixes and
6. Pupils will sh
hension.

PRE-POST TEST

	COMMUNICATIONS
ing)	UNIT 3 MEASUREMENT OF ELECTRICITY
ric units ntific notation. e the student will	OBJECTIVES: 1. Pupils will demonstrate improved knowledge of the history of measurement by answering oral and written questions. 2. Pupils will be able to make reports on related scientific reading with emphasis on men who have contributed to the development of electricity. 3. Pupils will be able to recognize, use, and write Greek alphabets and symbols used in electricity and Math. 4. Pupils will be able to spell and define words selected from this unit. 5. Pupils will demonstrate knowledge of Latin and Greek prefixes and roots in vocabulary study. 6. Pupils will show improvement in reading comprehension. PRE-POST TEST

LABORATORY

CONTENT

1. Measurements with the voltmeter
2. Measurements with the ampmeter
3. Measurements with the milliampmeter
4. Measurements with the Ohmmeter
5. Measurements with the power meter.
6. Measurements with the multimeter.

CONTENT

1. Theory o
2. Theory o
3. Theory o

CONTENT

1. Theory of voltmeter
2. Theory of ohmmeter
3. Theory of ampmeter

2. Which is larger, 500 meters or 2 kilometers?
3. Use scientific notation to multiply 3 millimeters times 2 centimeters.
4. Convert 25 meters to hectometers.
5. Write in decimal form: 3.6×10^{-2}.
6. Write in scientific notation: .00000834.
7. Use your slide rule to calculate 38200 x .226.
8. Use your slide rule to calculate $\sqrt[3]{828}$.
9. Approximately how tall are you in decimeters?
10. Use your slide rule to calculate $\sqrt{834} \times (2.6 \times 10^5)$.

CONTENT

1. Metric system
2. Scientific notation
3. Basic slide rule - multiplication, division, square and cube root.

CONTENT

1. Spelling an
   a. Latin an
   b. Greek a
   c. Technic
2. Grammar and
3. Technical w electricity
4. Writing up

C S	C O M M U N I C A T I O N S
ometers?	
3	
00834.	
200 x .226.	
828.	
ecimeters?	
	CONTENT
	1. Spelling and vocabulary
	a. Latin and Greek prefixes
	b. Greek alphabets and symbols
	c. Technical words
	2. Grammar and Usage
	3. Technical written reports on measurements of electricity.
18	4. Writing up experiments

LABORATORY	
METHODOLOGY 1. Class demonstrations on the actual items listed and with demonstration equipment. 2. Class lectures	METHODOLOGY 1. Lecture 2. Handout 3. Discuss
STUDENT LEARNING ACTIVITIES 1. Actual work experience on the various electrical equipment using the multimeter 2. Class discussions 3. Class lectures	STUDENT LE 1. Discus 2. Drawin 3. Proble

tems

ent.

METHODOLOGY

1. Lecture
2. Handouts
3. Discussions

s electrical

STUDENT LEARNING ACTIVITIES

1. Discussions
2. Drawing and labeling meter circuits.
3. Problem solving

MATHEMATICS	
	5. Scientific
	6. Improving
	a. Findin
	b. Spotti
	c. Guessi
MEHTODOLOGY	METHODOLOGY
1. Examples at blackboard	1. Teacher le
2. Meter stick	2. Filmstrips
3. Demonstrate slide rule	3. Class disc
4. Filmloops	4. Testing
	5. Written ar
	6. Reading to details, a
STUDENT LEARNING ACTIVITIES	STUDENT LEARN
1. Use of text	1. Provide p prefixes
2. Operation of slide rule	2. Have pupi thought, meaning.
3. Use of meter stick	3. Have pupi
4. Homework	

	COMMUNICATIONS
	5. Scientific readings
	6. Improving reading comprehension
	a. Finding central thought
	b. Spotting important specific details
	c. Guessing at meaning of words from context.
	METHODOLOGY
	1. Teacher led discussions
	2. Filmstrips
	3. Class discussions
	4. Testing
	5. Written and oral reports
	6. Reading to find central thought, to spot specific details, and to guess at word meaning through context.
	STUDENT LEARNING ACTIVITIES
	1. Provide pupils with list of Greek alphabets, symbols, prefixes and roots to be learned.
	2. Have pupils to read selected passages to find central thought, spot specific details, and to guess at word meaning.
20	3. Have pupils to do scientific research.

LABORATORY	
POST TEST	POST TEST

POST TEST

UNIT 4

SOURCES OF ELECTRICITY

UNIT 4

SOURCES OF ELECTRICITY

L A B O R A T O R Y	
UNIT 4 SOURCES OF ELECTRICITY	UNIT 4 SOURCES
OBJECTIVES: The students will be able to identify the various methods for producing electricity and will be able to explain how they can be practically utilized	OBJECTIVES: 1. The student of the diff 2. The student of the theo
PRE-POST TEST 1. Name five sources of electricity. 2. How do these sources produce electricity? 3. How many of the above are used commercially? How? 4. If not used commercially explain your idea on how they could be.	PRE-POST TEST

	SCIENCE
	UNIT 4 SOURCES OF ELECTRICITY
various methods e to explain y?	OBJECTIVES: 1. The students will be able to demonstrate a knowledge of the different sources of electricity. 2. The students will be able to demonstrate a knowledge of the theory of the different sources. PRE-POST TEST

MATHEMATICS	
UNIT 4 SOURCES OF ELECTRICITY	UNIT 4 SOURCES O
OBJECTIVES:	OBJECTIVES:
1. Students shall demonstrate a knowledge of complex fractions by combining portions of the type $\frac{\frac{1}{x}}{\frac{1}{y}}$ through +, -, x, ÷.	Pupils will be a
2. The students shall graph, on an x-y plane, linear equation (AX + BY = C).	1. Give oral subjects concernin the devel
3. The student will demonstrate a knowledge of the laws of exponents by combinations of bases other than 10 (scientific notation).	2. Write up
PRE-POST TEST	3. Spell and to this u
1. Simplify: a. $\frac{2}{\frac{1}{2}}$ b. $\frac{2\frac{1}{2}}{4\ 1/3}$ c. $\frac{.25}{\frac{1}{4}}$	PRE-POST TEST
2. Add: $\frac{1\ 1/3}{1\ 1/8} + \frac{2}{3}$	
3. State the general QUADRATIC EQUATION.	
4. Without solving, what is the sum of the roots of $5x^2 + 3x - 6 = 0$? $-\frac{b}{a}$	
5. State the quadratic formula.	
6. Solve by any method: $\frac{2}{3x^2} + 2x - \frac{1}{2} = 0$.	

S	COMMUNICATIONS
	UNIT 4 SOURCES OF ELECTRICITY
of complex type $\frac{\frac{1}{x}}{\frac{1}{y}}$ lane, linear lge of the laws other than $\frac{.25}{\frac{1}{4}}$. the roots of	OBJECTIVES: Pupils will be able to: 1. Give oral and written reports on technical subjects and on related historical material concerning men who have contributed to the the development of electricity. 2. Write up experiments in good form. 3. Spell and define scientific words relating to this unit. PRE-POST TEST

LABORATORY	
CONTENT 1. Batteries 2. Solar cells 3. Generators (alternators) 4. Thermocouple 5. Crystals 6. Practical utilization of each of the above.	CONTENT 1. Batteries 2. Solar cells 3. Generators (al 4. Thermocouple 5. Crystals

ve.

CONTENT

1. Batteries
2. Solar cells
3. Generators (alternators)
4. Thermocouple
5. Crystals

7. Simplify $\sqrt[3]{\frac{27x^2}{8y^3}}$

8. When multiplying powers with like bases the exponents are _____.

9. Divide: $\frac{5^3\ x^2\ y^9}{25xy^2\ z^3}$

10. Multiply: $3^{-2}\ x^4\ \times 3^4\ x^2\ y^{-3}$.

CONTENT

1. Complex fractions
2. Quadratic equations and square roots
3. Powers - laws of exponents

CONTENT

1. Spelling
2. Technical vocab
3. Scientific read
4. Reporting
   a. Oral
   b. Written
5. Grammar and use
6. Library referen
7. Other sources

CONTENT

1. Spelling
2. Technical vocabulary
3. Scientific readings
4. Reporting
   a. Oral
   b. Written
5. Grammar and usage for technical writings
6. Library reference materials
7. Other sources

LABORATORY	
METHODOLOGY	METHODOLOGY
1. Class demonstrations of each type of source These demonstrations will come from equipment in which each source is used.	1. Lecture
2. Class discussions.	2. Class discus
	3. Films
	4. Reports
	5. Demonstratio
	6. Experiments
STUDENT LEARNING ACTIVITIES	STUDENT LEARNING
1. Class demonstrations	1. Class discus
2. Class discussions	2. Handouts
3. Reading assignments	3. Reports
4. Class experiments	4. Experiments
POST TEST	POST TEST

	SCIENCE
rce pment	**METHODOLOGY** 1. Lecture 2. Class discussions 3. Films 4. Reports 5. Demonstrations 6. Experiments **STUDENT LEARNING ACTIVITIES** 1. Class discussions 2. Handouts 3. Reports 4. Experiments **POST TEST**

MATHEMATICS	C
METHODOLOGY 1. Blackboard 2. Filmstrips	METHODOLOGY 1. Discussions 2. Filmstrips 3. Tests 4. Reports (Oral an
STUDENT LEARNING ACTIVITIES 1. Let student work at the blackboard. 2. Let students help each other as class work. 3. Use of text. 4. Homework.	STUDENT LEARNING ACT 1. Provide pupils w 2. Look up material development of e 3. Make reports 4. Discussions 5. Read articles co 6. Group projects 7. Provide reading
POST TEST	POST TEST

	COMMUNICATIONS
	METHODOLOGY 1. Discussions 2. Filmstrips 3. Tests 4. Reports (Oral and Written) STUDENT LEARNING ACTIVITIES 1. Provide pupils with vocabulary list 2. Look up material on men who have contributed to the development of electricity 3. Make reports 4. Discussions 5. Read articles concerning electricity from newspapers 6. Group projects 7. Provide reading periods POST TEST

UNIT 5

MAGNETISM

UNIT 5

MAGNETISM

L A B O R A T O R Y

UNIT 5 MAGNETISM

OBJECTIVES:

The students will be able to construct both an electromagnet and a permanent magnet and will be able to show where each one of these are practically used.

PRE-POST TEST

1. Explain how magnetism relates to electron flow with reference to the alternator.
2. What determines the magnetic flux in an electromagnet?
3. Explain how electromagnets are used in such things as bells and buzzers.
4. How does an alternator differ from a generator?
5. Explain how a P.M. motor works.

UNIT 5 MAGNETISM

OBJECTIVES:

1. The students
familiarity
2. The students
dealing with

PRE-POST TEST

UNIT 5 MAGNETISM

OBJECTIVES:

1. The students will be able to demonstrate a familiarity with magnetic theory.
2. The students will be able to solve problems dealing with magnetism.

PRE-POST TEST

oth an

will

are

ron

n

enerator?

MATHEMATICS	C
UNIT 5 MAGNETISM	UNIT 5 MAGNETISM
OBJECTIVES:	OBJECTIVES:
1. The student will define ratio and proportion as related to fractiors and equal fractions.	1. Pupils will be a of magnetism in
2. Given ratio and proportion, the student will solve simple equations and basic formulas.	2. Pupils will demo paragraphing by
3. Given a proportion, the student will demonstrate a knowledge of terms and their cross products.	3. Pupils will be a using good gramm
	4. Given a list of pupils will be a
PRE-POST TEST	PRE-POST TEST
1. Define ratio.	
2. What are the 1st and 4th terms in a proportion called?	
3. Using the proportion $\frac{a}{b} = \frac{c}{d}$, illustrate what is meant by "the product of the means equals the product of the extremes".	
4. True or false: $\frac{a}{b} = \frac{c}{d} \rightarrow \frac{a}{c} = \frac{b}{d}$?	
5. What is the formula to find the volume of a cube?	

rate

s.

on

what

cube?

COMMUNICATIONS

UNIT 5 MAGNETISM

OBJECTIVES:

1. Pupils will be able to discuss the basic principles of magnetism in speech and writing.
2. Pupils will demonstrate improved knowledge of paragraphing by writing well-developed paragraphs.
3. Pupils will be able to construct complete sentences using good grammar, punctuation, and usage.
4. Given a list of words selected from this Unit, pupils will be able to spell and define them.

PRE-POST TEST

LABORATORY

CONTENT

1. Construction of electromagnet
2. Construction of permanent magnet
3. Simple P.M. and electromagnets.
4. P. M. motors (D.C.).
5. A.C. motors
6. Bells, buzzers and other similar electromagnetic operated devices.
7. Generators
8. Alternators

CONTENT

1. Laws of mag
2. Electron fl
3. Magnetic fl

CONTENT

1. Laws of magnetism.
2. Electron flow and magnetism.
3. Magnetic flux.

6. Find the volume of a cylinder whose height is 6" and whose base has a radius of 2".

7. Solve for x and y = $2x = 3y - 4$
$y + 6x = 4y + x - 8$

8. Explain why $x = \frac{2}{5}$ can be classified as a proportion.

9. Solve by product of extremes and means = $\frac{R}{2} = \frac{E}{I}$ where E = 110 and I = 20.

10. Simplify this ratio: $\frac{26xy}{13xy}$.

CONTENT

1. Ratio and Proportion
2. Further study in equations and formulas with an introduction to simultaneous equations.

CONTENT

1. Discussions of
2. Grammar and Us
3. Oral and Writt
4. Spelling vocab
5. Laws of magnet
6. Sentence struc
7. Scientific rea
8. Experiment rep

COMMUNICATIONS

CONTENT

1. Discussions of projects and experiments
2. Grammar and Usage for technical writings
3. Oral and Written reports
4. Spelling vocabulary
5. Laws of magnetism
6. Sentence structure and paragraphing
7. Scientific readings
8. Experiment reports

LABORATORY	
METHODOLOGY 1. Construction of an experimentation with: a. Electromagnet b. Bell c. D.C. motor d. D.C. generator 2. Class discussions 3. Reading assignments	METHODOLOGY 1. Lecture 2. Discussion 3. Demonstrati 4. Handouts
STUDENT LEARNING ACTIVITIES 1. Construction of buzzer (individual) 2. Group construction of a. D.C. motor b. D. C. generator 3. Class discussion 4. Reading assignments	STUDENT LEARNIN 1. Class discu 2. Handouts 3. Reading ass 4. Problem sol
POST TEST	POST TEST

n:

METHODOLOGY

1. Lecture
2. Discussion
3. Demonstrations
4. Handouts

STUDENT LEARNING ACTIVITIES

1. Class discussions
2. Handouts
3. Reading assignments
4. Problem solving

POST TEST

MATHEMATICS	C
METHODOLOGY 1. Use of blackboard 2. Filmstrips	METHODOLOGY 1. Oral and Writte 2. Discussions 3. Filmstrips
STUDENT LEARNING ACTIVITIES 1. Solving problems at the blackboard 2. Use of text 3. Numerous examples for homework	STUDENT LEARNING AC 1. Study, discuss, paragraphs 2. Find topic sent and name suppor 3. Read articles f to magnetism an 4. Provide list of 5. Provide reading
POST TEST	POST TEST

	COMMUNICATIONS
	METHODOLOGY 1. Oral and Written reports 2. Discussions 3. Filmstrips STUDENT LEARNING ACTIVITIES 1. Study, discuss, develop, and organize technical paragraphs 2. Find topic sentence in technical writing and name supporting details 3. Read articles from magazines and newspapers relating to magnetism and make reports in class 4. Provide list of words selected from this unit 5. Provide reading periods POST TEST

UNIT 6

TRANSFORMERS

UNIT 6

TRANSFORMERS

LABORATORY	
UNIT 6 TRANSFORMERS	UNIT 6 TRANSFORM
OBJECTIVES: To give the students a basic understanding of transformer action so that they will be able to hook up any basic type of transformer.	OBJECTIVES: 1. The students a knowledge operation. 2. The students dealing with
PRE-POST TEST 1. What is a step-up transformer? 2. What is a step-down transformer? 3. Explain Pin = Pout 4. What is the difference between a simple, dual, and three phase transformer? 5. What is the actual purpose of a transformer?	PRE-POST TEST

	SCIENCE
	UNIT 6 TRANSFORMERS
g of ble to hook	OBJECTIVES: 1. The students will be able to demonstrate a knowledge of the theory of transformer operation. 2. The students will be able to solve problems dealing with transformers.
,	PRE-POST TEST
rmer?	

MATHEMATICS	C
UNIT 6 TRANSFORMERS	UNIT 6 TRANSFORMERS
OBJECTIVES:	OBJECTIVES:
1. Given basic power formulas, the student will demonstrate a basic understanding of algebra by substituting and transposing to derive new formulas.	1. Pupils will be of transformer speech.
2. Given formulas and values, the student will solve for unknowns such as voltage, current, power.	2. Pupils will be words selected
3. The student will demonstrate a knowledge of graphs through definitions and actual graphing linear equations.	3. Pupils will dem good usage, and
	4. Pupils will be
	a. Write lette
	b. Fill out jo
	c. Conduct the
PRE-POST TEST	PRE-POST TEST
1. a. What is the degree of a linear equation?	
b. What is the degree of a quadratic equation?	
2. Define parabola.	
3. Without graphing, give the ordered pair of the vertex of the parabola $y = (x - 2)^2 + 3$.	

	COMMUNICATIONS
	UNIT 6 TRANSFORMERS
ill bra by substi- ulas. ll solve wer. of phing on? ation? f 3.	OBJECTIVES: 1. Pupils will be able to discuss the basic principles of transformer action and hook-up in writing and speech. 2. Pupils will be able to spell and define technical words selected from this unit. 3. Pupils will demonstrate ability to use good grammar, good usage, and to punctuate in all written work. 4. Pupils will be able to: a. Write letters of application b. Fill out job application blanks c. Conduct themselves confidently in an interview. PRE-POST TEST

LABORATORY	
CONTENT 1. Purpose of transformers 2. Step-up transformers 3. Step-down transformers 4. Polyphase transformers 5. Transformer hook-up	CONTENT 1. Inductance 2. Step-up tran 3. Step-down tr

CONTENT

1. Inductance
2. Step-up transformers
3. Step-down transformers

4. Is the vertex of this parabola a maximum or minimum point: $y = -\frac{1}{2}(x + 9)^2 - 1/3$?

5. State the equation of a circle with radius r and center (h, k).

6. Graph the equation whose center is (-9, -3) and whose radius is ½.

7. Find the radius of the circle whose center is (0,0) and that contains the point (1,3).

8. Give the ordered pair of the center of the circle with the equation $x^2 + y^2 = 25$.

CONTENT

1. Power Formulas
   a. $P = VI$
   b. $P = I^2R$
   c. $P = \frac{V^2}{R}$
   d. $P = VI \cos \theta$
2. Graphs
   a. x - y axis
   b. linear equations

CONTENT

1. Spelling and vo
2. Grammar and usa
3. Technical readi
4. Job interviews
5. Application bla
6. Experiment repo
7. Technical repor
8. Letter writing

	COMMUNICATIONS
and s	
	CONTENT 1. Spelling and vocabulary 2. Grammar and usage 3. Technical readings 4. Job interviews 5. Application blanks 6. Experiment reports 7. Technical reports 8. Letter writing (Letter of Application)

LABORATORY	
METHODOLOGY	METHODOLOGY
1. Class lectures	1. Lecture
2. Class discussions	2. Class discus
3. Field trip to a sub-station	3. Films
	4. Demonstratio
	5. Handouts
STUDENT LEARNING ACTIVITIES	STUDENT LEARNING
1. Class lectures	1. Class discus
2. Class discussions	2. Solving hand
3. Field trip	3. Reading assi
4. Reading assignments	
5. Individual construction of transformers	
6. Transformer Hook-ups	
POST TEST	POST TEST

METHODOLOGY

1. Lecture
2. Class discussion
3. Films
4. Demonstrations
5. Handouts

STUDENT LEARNING ACTIVITIES

1. Class discussion
2. Solving handout problems
3. Reading assignments

POST TEST

MATHEMATICS	C
METHODOLOGY	METHODOLOGY
1. Blackboard	1. Discussions
2. Transparencies	2. Spelling and voc
3. Filmstrips	3. Filmstrips
	4. Letter writing (
	5. Job interviews
	6. Oral and written
STUDENT LEARNING ACTIVITIES	STUDENT LEARNING ACT
1. Work problems at blackboard	1. Make oral and wr assignments.
2. Use of text	2. Write letters of
3. Homework	3. Write checks, ba slips
	4. Prepare applicat information
	5. Have interviews
POST TEST	POST TEST

COMMUNICATIONS

METHODOLOGY

1. Discussions
2. Spelling and vocabulary study
3. Filmstrips
4. Letter writing (Letter of Application)
5. Job interviews
6. Oral and written reports

STUDENT LEARNING ACTIVITIES

1. Make oral and written reports on technical assignments.
2. Write letters of application
3. Write checks, balance stubs, and make out deposit slips
4. Prepare application forms including pertinent information
5. Have interviews

POST TEST

UNIT 7

ELECTRICAL CIRCUITS

UNIT 7

ELECTRICAL CIRCUITS

LABORATORY	
UNIT 7 ELECTRICAL CIRCUITS	UNIT 7 ELECTRICA
OBJECTIVES: To give the student a basic understanding of commercial wiring techniques so that he will be able to do simple wiring jobs.	OBJECTIVES: 1. The students a knowledge 2. The students power and en Ohm's Laws a in order to
PRE-POST TEST Observation of wiring techniques with emphasis on safety and neatness.	PRE-POST TEST

Y	SCIENCE
	UNIT 7 ELECTRICAL CIRCUITS
ing t he will be h	OBJECTIVES: 1. The students will be able to demonstrate a knowledge of the concepts of power and energy. 2. The students will be able to use the concepts of power and energy along with the concepts of Ohm's Laws and series and parallel circuits in order to solve problems. PRE-POST TEST

MATHEMATICS	C
OBJECTIVES:	OBJECTIVES:
1. Given sine, cosine, and tangent functions, the student will demonstrate a basic understanding of trigonometry by problem solving.	Pupils should be ab
2. Given graph paper, the student will graph the sine function.	1. Write clear, circuits and on safety an
3. Since the valve of π is now being used, the student will demonstrate his knowledge of circles by definitions and formulas.	2. Give clear o circuits and
PRE-POST TEST	3. Make technic
1. Using your tables, what is the tangent of 48°?	4. Spell techni
2. Find the radius of a circle with an area of 130 sq. in.	PRE-POST TEST
3. If a 30' ladder was placed against a building so that the base of the ladder was 12' from the base of the building, what angle would be formed by the ladder and the ground?	
4. What angle would be formed by a 20' pole and a rope attached to the top of the pole if the rope touched the ground 15'	

	COMMUNICATIONS
tanding he he 8°? f ng so e ormed	OBJECTIVES: Pupils should be able to: 1. Write clear, coherent reports on electrical circuits and commerical wiring with emphasis on safety and neatness. 2. Give clear oral explanations of electrical circuits and commerical wiring using diagrams. 3. Make technical reports on all projects. 4. Spell technical words selected from this unit. PRE-POST TEST

LABORATORY	
CONTENT Wiring of bells, motors, generators, lights, and other electrical apparatus that is commonly found in homes and industries	CONTENT 1. Power 2. Energy 3. Review of O and series
METHODOLOGY 1. Supervision and inspection of each student's wiring ability with help to the individual	METHODOLOGY 1. Lecture 2. Class discu

CONTENT

1. Power
2. Energy
3. Review of Ohm's Law, parallel circuits, and series circuits.

METHODOLOGY

1. Lecture
2. Class discussion

from the base of the pole?

5. Briefly explain how you could determine the value of π if you knew the radius and the circumference of a circle.

6. Sketch the sine wave locating 10 points accurately by using your table.

7. Explain why the tangent of 90° is indeterminate.

CONTENT

1. Basic right triangular trigonometry
   a. Sine
   b. Cosine
   c. Tangent
   d. Pythagoean Theorem
2. Graphing the sine wave
3. Circle

METHODOLOGY

1. Boardwork
2. Filmstrips

CONTENT

1. Technical vocabu
2. Experiment repor
3. Technical report
4. Critiques
5. Technical readin
   a. Read
   b. Discuss
   c. Write
6. Grammar and usag

METHODOLOGY

1. Teacher led disc
2. Reports

	COMMUNICATIONS
nate.	CONTENT 1. Technical vocabulary 2. Experiment reports 3. Technical reports (on projects) 4. Critiques 5. Technical readings a. Read b. Discuss c. Write 6. Grammar and usage METHODOLOGY 1. Teacher led discussions 2. Reports

LABORATORY	
student. 2. Class discussions. 3. Class wiring practices	3. Demonstrations 4. Handouts
STUDENT LEARNING ACTIVITIES 1. Hopefully here the students can take numerous field trips where they can actually wire electrical apparatus under the supervision of the instructor. 2. Class discussion.	STUDENT LEARNING A 1. Class discussi 2. Solving proble 3. Films
POST TEST	POST TEST

3. Demonstrations

4. Handouts

STUDENT LEARNING ACTIVITIES

1. Class discussion

2. Solving problems

3. Films

POST TEST

MATHEMATICS	C O
3. Filmloops	a. Oral b. Written 3. Provide pupils wi 4. Explanations
STUDENT LEARNING ACTIVITIES	STUDENT LEARNING ACTI
1. Actual measuring of sides and angles of triangles to insure correct calculations. 2. Classwork - boardwork. 3. Homework.	1. Vocabulary study 2. Filmstrips, trans projector will be 3. Reading will be e newspapers, etc.) 4. The use of the li 5. Occasionally, pup to read and do re
POST TEST	POST TEST

	COMMUNICATIONS
	a. Oral b. Written 3. Provide pupils with vocabulary and spelling list. 4. Explanations STUDENT LEARNING ACTIVITIES 1. Vocabulary study will be constant. 2. Filmstrips, transparencies, and overhead projector will be used. 3. Reading will be encouraged. (books, magazines, newspapers, etc.) 4. The use of the library will be encouraged. 5. Occasionally, pupils will be taken to library to read and do research. POST TEST

UNIT 8

COMMERCIAL ELECTRICAL APPARATUS AND SUPPLIES

UNIT 8

AL ELECTRICAL APPARATUS AND SUPPLIES

LABORATORY	
UNIT 8 COMMERCIAL ELECTRICAL APPARATUS AND SUPPLIES	UNIT 8 COMMERCIA
OBJECTIVES:	OBJECTIVES:
To cover the various pieces of electrical apparatus and their approximate cost. To give the student an understanding where and how to buy electrical equipment. After this unit the student will be able to pick the best materials for a certain job and will know their approximate cost.	1. The students understandin and use of c
PRE-POST TEST	PRE-POST TEST
1. What are the basic types of switch boxes and where are these used? 2. What controls other than switches are used on motors? 3. Where are the cheapest places to obtain electrical equipment?	

	SCIENCE
PPLIES	UNIT 3 COMMERCIAL ELECTRICAL APPARATUS AND SUPPLIES
e buy and	OBJECTIVES: 1. The students will be able to demonstrate an understanding of the theory behind the operation and use of common electrical apparatus and supplies. PRE-POST TEST

MATHEMATICS	C
UNIT 8 COMMERCIAL ELECTRICAL APPARATUS AND SUPPLIES	UNIT 8 COMMERCIAL E
OBJECTIVES: To insure the students understanding of graphing and the use of graphing as a means for solving equations. 1. Now that the student has the basic knowledge of graphs introduced in the preceding units, he shall demonstrate deeper knowledge by solving equations using the graph. PRE-POST TEST 1. Determine the equation for the line containing the points (2,4) and (-1, -2). 2. What is the slope of the above line? 3. Graph the above line. 4. State the formula for the distance between two points.	OBJECTIVES: 1. Given certain e pupils will be correct form. 2. Pupils will dem practical appli cations. 3. Pupils will be to directions a 4. Pupils will be discussed in th PRE-POST TEST

	COMMUNICATIONS
PPLIES	UNIT 8 COMMERCIAL ELECTRICAL APPARATUS AND SUPPLIES
ns ge of olving aining n	OBJECTIVES: 1. Given certain electrical equipment to order, pupils will be able to write a letter using correct form. 2. Pupils will demonstrate proficiency in practical applications of oral and written communications. 3. Pupils will be able to listen actively and critically to directions and explanations. 4. Pupils will be able to spell technical words discussed in this unit. PRE-POST TEST

LABORATORY	
4. Name the major brands of cable used in the U. S. 5. How is the electrical code related to electrical supplies?	
CONTENT 1. Electrical supplies 2. Types of equipment 3. Motor control 4. Brand names 5. Electrical code 6. Cables and wires	CONTENT 1. Motor theory 2. Theory of why c wire is used in

CONTENT

1. Motor theory
2. Theory of why different lengths and diameter wire is used in different applications.

MATHEMATICS	CO
5. Give the ordered pair for the midpoint of the line segment having endpoints (2,6) and (5,3).	
6. Graph: $y = 2x + 3$ and $2x + 4y - 12 = 0$ and estimate the common values of x and y.	
7. Solve the above simultaneous equations algebraically to check your answer in #6.	
8. What is a Cartesian plane?	
CONTENT	CONTENT
1. Deeper study of Cartesian plane and linear equations.	1. Letter writing
2. Formula for the distance between two points.	a. Order letters
3. Midpoint formula.	b. Letters reques catalogues
4. Review of simultaneous equations.	2. Grammar and usage
	3. Spelling
	4. Vocabulary
	5. Listening and comm
	6. Oral reports on te
	7. Laboratory progres

	COMMUNICATIONS
5,3).	
uations.	CONTENT 1. Letter writing a. Order letters b. Letters requesting information and catalogues 2. Grammar and usage 3. Spelling 4. Vocabulary 5. Listening and communication skills 6. Oral reports on technical readings 7. Laboratory progress reports

LABORATORY	
METHODOLOGY	METHODOLOGY
1. Lectures	1. Lecture
2. Class discussion	2. Class discuss
3. Demonstration	3. Demonstration
	4. Handouts
STUDENT LEARNING ACTIVITIES	STUDENT LEARNING
1. Class room discussion	1. Class discuss
2. Reading assignments	2. Working hando
3. Field trips	3. Reading assig
POST TEST	POST TEST

	SCIENCE
	METHODOLOGY 1. Lecture 2. Class discussion 3. Demonstrations 4. Handouts STUDENT LEARNING ACTIVITIES 1. Class discussion 2. Working handout sheets 3. Reading assiguments POST TEST

MATHEMATICS	C
METHODOLOGY	METHODOLOGY
1. Examples at blackboard (Cartesian Plane)	1. Discussions
2. Filmstrips	2. Reports
3. Transparencies.	
STUDENT LEARNING ACTIVITIES	STUDENT LEARNING ACTI
1. Classwork - desk and blackboard	1. Lab reports writt
2. Use of text	2. Spelling list of
3. Homework	3. Discussions on wo
	4. Progress reports
	5. Letter writing
POST TEST	POST TEST

COMMUNICATIONS

METHODOLOGY

1. Discussions
2. Reports

STUDENT LEARNING ACTIVITIES

1. Lab reports written
2. Spelling list of technical words provided.
3. Discussions on work done in laboratory.
4. Progress reports of activities in lab.
5. Letter writing

POST TEST

UNIT 9

INTRODUCTION TO BASIC ELECTRONIC COMPONENTS

UNIT 9

DUCTION TO BASIC ELECTRONIC COMPONENTS

LABORATORY	
UNIT 9 INTRODUCTION TO BASIC ELECTRONIC COMPONENTS	UNIT 9 INTRODUCTION
OBJECTIVES: To give the student a basic understanding of electronic components and their use so that they will be able to build simple electronic devices.	OBJECTIVES: 1. The students wi knowledge of th vacuum tubes, t
PRE-POST TEST 1. What is the function of: 1) Resistor 2) Capacitor 3) Vacuum tube 4) Transistor 5) Coil 6) Diode 2. Where would each of the above be found? 3. What does each of the above do to an AC signal? To a DC signal? 4. What is the unit associated with each	PRE-POST TEST

TS

UNIT 9 INTRODUCTION TO BASIC ELECTRONIC COMPONENTS

t they

es.

OBJECTIVES:

1. The students will be able to demonstrate a knowledge of the theory of capacitors, resistors, vacuum tubes, transistors, diodes and coils.

PRE-POST TEST

MATHEMATICS	C
UNIT 9 INTRODUCTION TO BASIC ELECTRONIC COMPONENTS	UNIT 9 INTRODUCTION

OBJECTIVES:

1. The student will demonstrate knowledge in using logarithmic tables.
2. Given log tables, the student will solve fairly complex problems using products and quotients of radicals and powers.

PRE-POST TEST

1. What is a logarithmic function?
2. $b^{\log -x}$ = _____.
3. Complete the theorem: $\log_b a^c$ = _____.
4. Write in exponential form: $\log_{\frac{1}{2}} 8 = -3$.
5. Write in logarithmic form: $81 = 3^4$.
6. True or false: $\log_2 8 - \log_{\frac{1}{2}} 8 = 6$
7. Evaluate: $\log_{10} 1140$.
8. Evaluate: $\text{antilog}_{10} 0.8401$.
9. In logarithms, what is the purpose of the characteristic?
10. Evaluate: $\log_5 927$.

OBJECTIVES:

PRE-POST TEST

	COMMUNICATIONS
TS	UNIT 9 INTRODUCTION TO BASIC ELECTRONIC COMPONENTS
ing	OBJECTIVES:
	PRE-POST TEST

LABORATORY	
of them? (Ex: coil - Henry) 5. Draw the symbol for each. CONTENT 1. Resistors 2. Capacitors 3. Vacuum tubes 4. Transistors 5. Coils 6. Diodes 7. Symbols METHODOLOGY 1. Lectures 2. Demonstration 3. Student projects STUDENT LEARNING ACTIVITIES 1. Lectures 2. Demonstration 3. Reading assignments 4. Experimentation with components	CONTENT 1. Resistors 2. Capacitors 3. Vacuum tubes 4. Transistors 5. Coils 6. Diodes 7. Symbols METHODOLOGY 1. Lecture 2. Class discuss 3. Demonstration STUDENT LEARNING 1. Class discuss 2. Reports

	SCIENCE
	CONTENT 1. Resistors 2. Capacitors 3. Vacuum tubes 4. Transistors 5. Coils 6. Diodes 7. Symbols METHODOLOGY 1. Lecture 2. Class discussion 3. Demonstrations STUDENT LEARNING ACTIVITIES 1. Class discussions 2. Reports

MATHEMATICS		C C
CONTENT		CONTENT
1. Polynomial Functions a. Review linear equations b. Review basic quadratic equations c. Parabola d. Circle	1. Logarithms a. mantissa b. characteristic 2. Converting from expeverted form to log form 3. Basic laws of logs. 4. Use of log tables	
METHODOLOGY		METHODOLOGY
1. Blackboard 2. Filmstrips 3. Demonstrating graphs		
STUDENT LEARNING ACTIVITIES		STUDENT LEARNING ACTI
1. Solving equations at blackboard 2. Graphing at board 3. Homework		

	COMMUNICATIONS
ms issa acteristic ng from ed form orm ws of logs. og tables	CONTENT METHODOLOGY STUDENT LEARNING ACTIVITIES

LABORATORY	
POST TEST	POST TEST

POST TEST

MATHEMATICS	C
POST TEST	POST TEST

POST TEST

UNIT 10

ELECTRONIC CIRCUITS

UNIT 10

ELECTRONIC CIRCUITS

LABORATORY	
UNIT 10 ELECTRONIC CIRCUITS	UNIT 10 ELECTRONI
OBJECTIVES: To teach the student the basic combinations of the components covered in the last section in a form so that he will be able to combine them to do a useful task.	OBJECTIVES: 1. The students a knowledge o
PRE POST TEST Draw a schematic of a simple radio which uses one stage of amplification (AF) and a 110v. power supply.	PRE-POST TEST

	S C I E N C E
	UNIT 10 ELECTRONIC CIRCUITS
s	OBJECTIVES: 1. The students will be able to demonstrate a knowledge of the theory of electronic circuits. PRE-POST TEST

MATHEMATICS	C
UNIT 10 ELECTRONIC CIRCUITS	UNIT 10 ELECTRONIC
OBJECTIVES: 1. The student will show understanding of a word problem by listing given pertinent information. 2. The student will be able to solve basic algebraic word problems in a pre-determined logical manner.	
PRE-POST TEST	PRE-POST TEST
1. Explain exactly what is known, what is to be found, and the procedure you would follow in solving this problem: At a Book Fair, 600 books were sold, some pocket editions at 35¢ each and the rest hard-covered books at 50¢ each. The total receipts were equivalent to last year's intake when the same number of books were sold at an average price of 40 cents per book. How many of each kind of book were sold?	

PRE-POST TEST

LABORATORY

CONTENT

1. Rectification 68

CONTENT

1. Tuned circui

	SCIENCE
	CONTENT
63	1. Tuned circuits (frequency selection)

2. At a certain time two airplanes start from the same airport and travel in opposite directions at 350 miles an hour and 325 miles an hour respectively. In how many hours will they be 2025 miles apart?

3. A train left Omaha at 9 A.M. traveling at 50 mph. At 1 P.M. a plane also left Omaha and traveled in the same direction at 300 mph. At what time did the plane overtake the train?

4. A merchant mixes tea worth 90¢ a pound with some worth $1.50 a pound to make 20 lbs. of a blend which he can sell at $1.20 a pound. How many pounds of each kind of tea does he use?

5. Bill purchased 100 items in a stationery store for one dollar. He bought pencils at 10¢ each, 9 times as many erasers at 5¢ each, and clips at two-for-a-penny. How many of each did Bill buy?

CONTENT

1. Word problems 69

CONTENT

	COMMUNICATIONS
e es ph. in? use? ore ach, ps ill	
	CONTENT

LABORATORY	
2. Amplification	2. Amplificatio
3. Frequency selection	3. Rectificatio
METHODOLOGY	METHODOLOGY
1. Lectures	1. Lecture
2. Demonstrations	2. Class discus
3. Class discussions	3. Problem solv
	4. Demonstratio
STUDENT LEARNING ACTIVITIES	STUDENT LEARNING
1. Lectures	1. Class discus
2. Class discussions	2. Problem solv
3. Individual experiments	
4. Projects	
POST TEST	POST TEST

2. Amplification

3. Rectification

METHODOLOGY

1. Lecture

2. Class discussion

3. Problem solving

4. Demonstrations

STUDENT LEARNING ACTIVITIES

1. Class discussion

2. Problem solving

POST TEST

MATHEMATICS	C
a. reading for understanding	
b. distance problems	
c. mixture problems	
METHODOLOGY	METHODOLOGY
1. Filmstrips	
2. Boardwork	
STUDENT LEARNING ACTIVITIES	STUDENT LEARNING ACT
1. Boardwork and classwork	
2. Text	
3. Homework	
POST TEST	POST TEST

	COMMUNICATIONS
	METHODOLOGY
	STUDENT LEARNING ACTIVITIES
	POST TEST

EXTRA UNIT

GRAMMAR AND USAGE

This unit will be used along with all the other units in English.

EXTRA UNIT

GRAMMAR AND USAGE

This unit will be used along with all the other units in English.

MATHEMATICS	C
	UNIT: GRAMMAR AND US (Programmed Ma
	OBJECTIVES: Pupils will be able 1. Demonstrate kn and punctuatio 2. Convey meaning tenses correct 3. Use correct mo 4. Use correct pr 5. Use verbals co 6. Avoid run-toge fragments. PRE-POST TEST The standardized t will be administered CONTENT Grammar and Usage fo 1. The Verb and T 2. Patterns of th

UNIT: GRAMMAR AND USAGE FOR TECHNICAL WRITING
(Programmed Material)

OBJECTIVES:

Pupils will be able to:

1. Demonstrate knowledge of capitalization and punctuation in all writing.
2. Convey meaning accurately by using tenses correctly.
3. Use correct modifiers.
4. Use correct pronouns.
5. Use verbals correctly
6. Avoid run-together sentences and sentence fragments.

PRE-POST TEST

The standardized tests from English 2600 Workbooks will be administered before and after each unit.

CONTENT

Grammar and Usage for Technical writing

1. The Verb and The Subject
2. Patterns of the Simple Sentence

MATHEMATICS	COMMU
	3. The Work of Mod 4. Building Better 5. Understanding t 6. Using Verbs Cor 7. Agreement of Su 8. Choosing the Ri 9. Using Pronouns 10. How to Use Capi 11. Learning to Use 12. Apostrophes and METHODOLOGY 1. Filmstrips 2. Text (reading) 3. Practice 4. Testing 5. Discussions English 2600 Progra throughout the year, two weeks in order to

3. The Work of Modifiers
4. Building Better Sentences
5. Understanding the Sentence Unit
6. Using Verbs Correctly
7. Agreement of Subject and Verb
8. Choosing the Right Modifier
9. Using Pronouns Correctly
10. How to Use Capitals
11. Learning to Use Commas
12. Apostrophes and Quotation Marks.

METHODOLOGY

1. Filmstrips
2. Text (reading)
3. Practice
4. Testing
5. Discussions

English 2600 Programmed English book will be used throughout the year, but must complete each unit within two weeks in order to finish Program by end of year.

EXTRA UNIT

APPPLIANCE REPAIR

EXTRA UNIT

APPPLIANCE REPAIR

LABORATORY	
EXTRA UNIT APPLIANCE REPAIR	EXTRA UNIT APPLIA
OBJECTIVES: To cover in a more thorough aspect the repair of electrical appliances.	OBJECTIVES: The students quantity of another. Ex. joules
PRE-POST TEST Physical test based upon faults placed in appliances by the instructor.	PRE-POST TEST 1. Convert 10 jo 2. Give five exa energy may be

Y	SCIENCE
	EXTRA UNIT APPLIANCE REPAIR
the ctor.	OBJECTIVES: The students will be able to convert a quantity of energy from one form to another. Ex. joules to calories. PRE-POST TEST 1. Convert 10 joules to calories. 2. Give five examples of how one form of energy may be converted into another.

EXTRA UNIT APPLIANCE REPAIR | EXTRA UNIT APPLIANCE

OBJECTIVES:

1. Introduce to the student the study of sets.
2. Show how the study of sets is applicable to all fields of mathematics.
3. Introduce to the student the study of basic geometry.

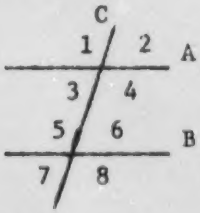
PRE-POST TEST

1. $\{1,3,5,7,\}$ $\{2,4,6,8\}$ = _____.
2. If $S = \{1,2,3,4\}$, $T = \{1,3,5\}$, $u = \{2,4,6,8\}$ then TR(SUU) = $\{\ \}$.
3. Draw a Venn Diagram illustrating the intersection of these two sets: $R = \{2,4,6,8,10\}$ and $S = \{2,4,8,9\}$.
4. What are parallel lines?
5. What is a transversal?
6. What are corresponding angles?

	COMMUNICATIONS
	EXTRA UNIT APPLIANCE REPAIR
4,6,8}	
er-	
10}	
77	

LABORATORY

	SCIENCE

7. 

Given that lines A and B are parallel and are cut by transversal C; L1 = 105°.

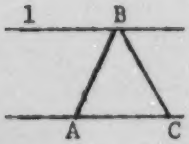
Find the measure of Ls 2 - 8.

8.

Given: △ ABC is isosceles; BD bisects LB

Prove: $\triangle ABD \overset{2}{=} \triangle CBD$.

9. Give a counterexample as to why proving 3 angles of one triangle congruent to 3 angles of another triangle does not prove the two triangles are congruent.

10. 

Using this diagram, with the fact that $1 \parallel \overline{AC}$, prove that the sum of the interior angles of a △ is 180°.

05 °.

es; BD bisects LB

3 angles

another

s are

the fact

the sum

f a △ is 180°.

LABORATORY	
CONTENT Advanced repair on the major types of appliances such as stove, heater, and air conditioner.	CONTENT 1. Heat energy 2. Electrical e 3. Mechanical e 4. Light energy 5. Sound energy 6. Nuclear ener
METHODOLOGY Individual student problems with a discussion on each.	METHODOLOGY 1. Lecture 2. Class discus 3. Reading assi 4. Handouts
STUDENT LEARNING ACTIVITIES Actual appliance repair and class discussion.	STUDENT LEARNING 1. Class discus 2. Reports 3. Reading assi 4. Problem solv
POST TEST	POST TEST

	SCIENCE
	CONTENT 1. Heat energy 2. Electrical energy 3. Mechanical energy 4. Light energy 5. Sound energy 6. Nuclear energy METHODOLOGY 1. Lecture 2. Class discussion 3. Reading assignments 4. Handouts STUDENT LEARNING ACTIVITIES 1. Class discussion 2. Reports 3. Reading assignements 4. Problem solving POST TEST

MATHEMATICS	
CONTENT	CONTENT
1. Study of sets	
a. symbols	
b. grouping	
c. Venn diagram	
2. Basic geometry	
METHODOLOGY	METHODOLOGY
1. Blackboard	
2. Transparencies	
3. Burns Boards	
4. Filmstrips	
STUDENT LEARNING	STUDENT LEARNING AC
1. Drawing Venn diagrams in class	
2. Probing numerous congruent triangles at blackboard.	
3. Construction	
4. Homework	
POST TEST	POST TEST

	COMMUNICATIONS
	CONTENT
	METHODOLOGY
	STUDENT LEARNING ACTIVITIES
kboard.	
	POST TEST

ACCESSION NUMBER: VT102210

PUBLICATION DATE: JUN71

TITLE: THE FAIRFIELD HIGH SCHOOL VOCATIONAL INTERDISCIPLINARY PROGRAM.

DESCRIPTOR: *GRADE 11; *TRADE AND INDUSTRIAL EDUCATION; HIGH SCHOOLS; *CURRICULUM GUIDES; *ELECTRONICS; ELECTRICAL OCCUPATIONS; *INTERDISCIPLINARY APPROACH

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 74P.; RELATED DOCUMENTS VT 102 208 THROUGH VT 102 210 IN THIS ISSUE.

ABSTRACT: THIS DOCUMENT PRESENTS A COURSE IN ELECTRONICS FOR GRADE 11 STUDENTS. THE 11 UNITS ARE ORGANIZED UNDER THE MAJOR HEADINGS OF LABORATORY, SCIENCE, MATHEMATICS, AND COMMUNICATIONS. EACH UNIT CONTAINS OBJECTIVES, AN OUTLINE OF THE CONTENT, AND LEARNING ACTIVITIES. THE UNITS COVER THE SUBJECTS OF ORIENTATION AND INTRODUCTION, LABORATORY SAFETY PROCEDURES AND TECHNIQUES, FUNDAMENTALS OF ELECTRICITY, SIMPLE CURRENTS, MAGNETISM, METERS, ALTERNATING CURRENT FUNDAMENTALS, LAWS AND PROPERTIES OF INDUCTORS, LAWS AND PROPERTIES OF CAPACITATORS, TUNED CIRCUITS, AND POWER SUPPLIERS. (LJ)

CONTRACT NUMBER: OEC-0-70-5190(361)

INSTITUTION NAME: FAIRFIELD HIGH SCHOOL, WINNSBORO, S.C.

SPONSORING AGENCY NAME: BUREAU OF ADULT, VOCATIONAL, AND TECHNICAL EDUCATION (DHEW/OE), WASHINGTON, D.C. DIV. OF VOCATIONAL AND TECHNICAL EDUCATION.

VT 102 210

FAIRFIELD HIGH SCH

VOCATIONAL INTERDISCIPL

June, 1971

VT 102 210

D HIGH SCHOOL

NTERDISCIPLINARY PROGRAM

Demonstration Programs
of
Vocational Education
in
South Carolina Region V
BAVTE/DVTE Project No. 0-361-0006
Contract No. OEC-0-70-5190(361)

The Fairfield High School

Vocational Interdisciplinary Program

11th Grade

Team Members:

Eugene E. Martin

Malcolm J. Skipper

Audrey F. Henry

The Fairfield High School

cational Interdisciplinary Program

11th Grade

Team Members:

Eugene E. Martin -Mathematics

Malcolm J. Skipper -Electronics

Audrey F. Henry -English

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The Over-all Objectives of the Course of
Fairfield High School's
Vocational Interdisciplinary Program of Study

To help students:

1. Succeed by working with them in a program that will benefit them.
2. Improve school attendance.
3. Improve their level of achievement.
4. Improve their attitude, outlook on life, and character.
5. Improve their grades.
6. Grow in intellectual curiosity and in the capacity to think critically.
7. Make an effective use of language in the daily affairs of life.
8. Enjoy school.
9. Gain a competent use of language and reading for vocational purposes.
10. Gain faith in and allegiance to the basic values of a democratic society.
11. Gain an habitual and intellectual use of the mass mediums of communication.

ne Over-all Objectives of the Course of
Fairfield High School's
ational Interdisciplinary Program of Study

program that will benefit them.

life, and character.

in the capacity to think critically.

in the daily affairs of life.

nd reading for vocational purposes.

basic values of a democratic society.

se of the mass mediums of communication.

GENERAL OBJECTIVES

GENERAL OBJECTIVES

LABORATORY	
GENERAL OBJECTIVES	GENERAL OBJECTIVES
1. To develop physical science concepts with the application to electronics. 2. To develop manipulative skills with safe work habits. 3. To present a variety of electronic experiments and problems to the student in order to develop his ability to cope with practical problems he will encounter in industry. 4. To develop in each student the desire for continued study and growth.	

	SCIENCE
	GENERAL OBJECTIVES
oncepts with the with safe work ronic experiments order to ith practical industry. desire for	

M A T H E M A T I C S

GENERAL OBJECTIVES

The aims of this course are to prove a sound theoretical background for a student in basic electronics. In order to give the reflexive experience necessary to attain the aims, each unit is purposely built upon and often overlapping the preceding unit. This is deemed fruitful in that recalling previous mathematical experiences are often necessary for proficiency in mathematical computations.

To keep the student in school and get him ready for the world of work or higher learning are also important goals.

TEXTBOOKS AND REFERENCE BOOKS

Brown, Kenneth, General Mathematics. Atlanta: Laidlaw Brothers

Graham, Frank; Audels Handy Book of Practical Electricity. New York: Audel and Co.

Slade, Samuel; Mathematics for Technical and Vocational Schools. New York: John Wiley and Sons, Inc.

GENERAL OBJECTIVES

The aims of thi
skills through study
crease the students'
students a general c
research and reporti

TEXTBOOKS AND REFERE

Aurner, A., Effectiv
Dallas:

Hedde, B., The New
New York

Stewart, L., Busines
New Yor

nd
lectronics.
sary
t upon
is
-
o-

aidlaw Brothers
lectricity.

ocational
and Sons, Inc.

COMMUNICATIONS

GENERAL OBJECTIVES

The aims of this course are to improve writing skills through studying sentence structure, to increase the students' vocabulary, and to give the students a general overview of the methods used in research and reporting.

TEXTBOOKS AND REFERENCE BOOKS

Aurner, A., Effective English for Business.
Dallas: South-Western Publishing Co.

Hedde, B., The New American Speech.
New York: J. B. Lippincott Company

Stewart, L., Business English and Communication.
New York: McGraw-Hill Book Company

UNIT 1

ORIENTATION AND INTRODUCTION

UNIT 1

ORIENTATION AND INTRODUCTION

LABORATORY	
UNIT 1 ORIENTATION AND INTRODUCTION	UNIT 1 ORIENTATION

OBJECTIVES

1. Students should have a baisc understanding about the course.
2. Students should know what is expected of him and what to expect from the course.
3. Students will be aware of the job opportunities in this area.

OUTLINE

A. What course is about

B. What we expect to accomplish

C. What this will mean to student

D. Job opportunities

	SCIENCE
	UNIT 1 ORIENTATION AND INTRODUCTION
tanding	
ed of him	
pportunities	

MATHEMATICS

UNIT 1: ORIENTATION AND INTRODUCTION

OBJECTIVES

1. Students will be able to apply the fundamental operations of addition, subtraction, multiplication and division.
2. Students will be able to perform everyday problems and solutions.

OUTLINE

A. Addition

B. Subtraction

C. Multiplication

D. Division

UNIT 1 ORIENTATION A

OBJECTIVES

1. Students wi disciplinar
2. Students wi tions weakn and paragra
3. Students wi achievement
4. Students wi good commun uation.
5. Students wi materials a

OUTLINE

A. Course obje
   1. General
   2. Communi
B. Formulation

UNIT 1 ORIENTATION AND INTRODUCTION

OBJECTIVES

1. Students will know the purpose of the interdisciplinary program.
2. Students will be aware of their own communications weaknesses through pre-tests in sentence and paragraph writing, spelling, and vocabulary.
3. Students will be able to verbalize personal achievement goals for the communications course.
4. Students will be able to explain the value of good communications skills in a working situation.
5. Students will be aware of the available printed materials about electronics.

OUTLINE

A. Course objectives
   1. General
   2. Communications

B. Formulation of individual student goals for the

LABORATORY	
E. What is expected of student	

LEARNING ACTIVITIES

1. Lecture
2. Question and answer period

	SCIENCE

MATHEMATICS	
E. Simple algebraic equations	course C. Study habit D. Value of go situations E. Introductio 1. Books 2. Pamphle 3. Magazin
LEARNING ACTIVITIES	LEARNING ACTIVITIES
1. Pre-test (algorisms of the four fundamental operations) 2. Pull-apart figures to illustrate fractions 3. Drawings to show miltiplication, addition of fractions 4. The following methods are to be used: a) Discussion b) Experiments c) Questionnaires d) Everyday math problems	1. Pretests a) Sentenc b) Paragra c) Spellin d) Vocabul 2. Class discu 3. Discussion 4. Study of su communicati a) films b) literat

course

C. Study habits and skills

D. Value of good communications skills in work situations

E. Introduction to abailable printed materials

1. Books

2. Pamphlets

3. Magazines

LEARNING ACTIVITIES

1. Pretests

a) Sentence writing

b) Paragraph writing

c) Spelling

d) Vocabulary

2. Class discussion of study habits

3. Discussion of writing standards

4. Study of successful people who have overcome communications handicaps.

a) films

b) literature

LABORATORY

MATHEMATICS	
	5. Trip to lib

	COMMUNICATIONS
	5. Trip to library to see available materials

UNIT 2

LABORATORY SAFETY PROCEDURES AND TECHNIQUES

UNIT 2

ATORY SAFETY PROCEDURES AND TECHNIQUES

LABORATORY	
UNIT 2 LABORATORY SAFETY PROCEDURES AND TECHNIQUES	UNIT 2 LABORATORY S

OBJECTIVES

1. Students should realize the need for certain lab procedures - how they affect his personal well being and the well being of his fellow students.
2. Students should be able to identify and explain the proper use of the various hand tools available in the lab.
3. Students will become familiar with the various functions of the lab console power supplies and meters and demonstrate their use by performing his experiments with safety and accuracy.
4. Students will demonstrate the function of the various instruments and use them in his experiments.

OUTLINE

A. Safety is electrical lab

B. Use of hand tools

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personal
fellow

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and

e various
pplies and
erforming
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n of the
is ex-

MATHEMATICS

UNIT 2 LABORATORY SAFETY PROCEDURES AND TECHNIQUES

OBJECTIVES

1. Students will be able to apply the proper use of measureing instruments.
2. Students will be able to use his ability to count, to measure, and to use symbols that stand for collections and amounts.

OUTLINE

A. Linear measurement (English and metric)

B. Accuracy

C

UNIT 2 LABORATORY SAFET

OBJECTIVES

1. Students will
notes in read
2. Students will
of writing:
a. short fic
b. newspaper
c. technical
3. Students will
or newspaper
4. Students will
ings and der
dictionary.
5. Students will
to spell name

OUTLINE

A. Procedures i

B. Form of type

	COMMUNICATIONS
ES	UNIT 2 LABORATORY SAFETY PROCEDURES AND TECHNIQUES
per ty to count, and for c)	OBJECTIVES 1. Students will demonstrate the ability to take notes in reading and listening situations. 2. Students will distinguish between various kinds of writing: a. short fiction b. newspaper articles c. technical reports 3. Students will write reports on technical magazine or newspaper articles. 4. Students will show the ability to look up meanings and derivations of technical words in the dictionary. 5. Students will demonstrate in writing the ability to spell names of pieces of laboratory equipment. OUTLINE A. Procedures in note taking B. Form of types of writing

LABORATORY	
C. Use of console D. Use of meters E. Basic construction techniques LEARNING ACTIVITIES 1. Lecture 2. Demonstration 3. Adjusting and using actual equipment	

	SCIENCE
ment	

C. Greatest possible error

D. Relative error

E. Calipers

1. Vernier

2. Micrometer

F. Measurement

1. Linear

2. Area

3. Volume

LEARNING ACTIVITIES

1. Use the following:

Protractors, rulers, and compasses for constructing angles on chalkboard and desk work.

2. The following methods to be used in problem solving:

a) Discussions

b) Questionnaires

c) Job math problems

d) Sales and tax problems

1. short fic

2. Articles

3. technical

C. Writing stand

D. Use of Dictic

E. Spelling of r

LEARNING ACTIVITIES

1. Write paragr

2. Give oral rep

3. Read literatu

4. Write reports

magazines

5. Use the dicti

derivations c

6. Spell names c

	COMMUNICATIONS
	1. short fiction 2. Articles (newspaper and magazine) 3. technical reports C. Writing standards for technical reports D. Use of Dictionary E. Spelling of names of laboratory equipment
for d problem solving:	<u>LEARNING ACTIVITIES</u> 1. Write paragraphs on safety 2. Give oral reports on safety 3. Read literature on the machine and safety 4. Write reports on articles from electronics magazines 5. Use the dictionary to find the meanings and derivations of technical terms 6. Spell names of laboratory equipment

LABORATORY

MATHEMATICS	C C
e) Pre-test on measuring instruments	

UNIT 3

FUNDAMENTALS OF ELECTRICITY

UNIT 3

FUNDAMENTALS OF ELECTRICITY

LABORATORY	
UNIT 3 FUNDAMENTALS OF ELECTRICITY	UNIT 3 FUNDAMENTALS

OBJECTIVES

1. The student should be able to understand the composition of matter and be familiar with the basic atomic theory.
2. The student will demonstrate how the composition of matter determines whether it is an insulator or conductor of electrons.
3. The student will demonstrate the difference between voltage, current, and resistance and explain their interdependence on each other when they comprise a circuit.

OUTLINE

A. Composition of matter

B. The Atom

C. Static charges

D. Conductor and insulators

E. Voltage

F. Current

rstand the
lar with

he composition
an insulator

ifference be-
nce and
ach other

MATHEMATICS	C
UNIT 3 FUNDAMENTALS OF ELECTRICITY	UNIT 3 FUNDAMENTALS O
OBJECTIVES	OBJECTIVES
1. Students will be able to solve algebraic equations.	1. Students wi complete se
2. Students will be able to apply algebraic problems in everyday living.	2. Students wi openers in
	3. Students wi sentences.
	4. Students wi men who hav electronics
OUTLINE	OUTLINE
A. Weight of materials	A. Simple sent
B. Additional use of positive and negative numbers	B. Sentence op
C. Equations containing positive and negative numbers	C. Sentence va
D. Ohm's Law	D. Historical f electronics
	E. Technical te

	C O M M U N I C A T I O N S
	UNIT 3 FUNDAMENTALS OF ELECTRICITY
	OBJECTIVES
aic	1. Students will show their ability to write complete sentences.
aic	2. Students will employ a variety of sentence openers in their written reports.
	3. Students will write interesting varied sentences.
	4. Students will know historical facts about men who have been prominent in the field of electronics. (e.g. George Simon Ohm)
	OUTLINE
	A. Simple sentences
ive	B. Sentence openers
	C. Sentence variety
	D. Historical figures who have contributed to electronics
	E. Technical terminology

LABORATORY	
G. Resistance H. Power LEARNING ACTIVITIES 1. Lecture 2. Demonstration 3. Performing experiments in work book 4. Question and answer period	

MATHEMATICS	COM
E. Rate and measuring problems	
LEARNING ACTIVITIES	LEARNING ACTIVITIES
1. Pre-test on rates and measuring problems	1. Analyzing si
2. Charts, maps, protractors, pulleys, and thermometers and gauges that illustrate the integers	2. Discussing s
3. In order to develop the ability of the students and give him a growing interest in his related subjects the following methods or procedures will be used:	3. Constructing
a) Class discussions	4. Writing repo
b) Questionnaires	5. Spelling tech
c) Demonstrations	
d) Experiments and daily related subject problems	

	COMMUNICATIONS
	LEARNING ACTIVITIES 1. Analyzing simple sentences 2. Discussing sentence elements 3. Constructing simple sentences 4. Writing reports on historical figures 5. Spelling technical terms

UNIT 4

SIMPLE CIRCUITS

UNIT 4

SIMPLE CIRCUITS

LABORATORY	
UNIT 4 SIMPLE CIRCUITS	UNIT 4 SIMPLE CIRCU

OBJECTIVES

Students will be able to:

1. Identify components by their physical appearance and be able to draw and identify their schematic symbol.
2. Demonstrate a good understanding of the Ohm's Law formulas for the various circuits components and demonstrate their use by computing voltage, current and resistance values in a circuit and prove his computation by voltmeters and ammeter readings.
3. Demonstrate with meters and reinforce with compulation that:
   A. Voltage is additive in series.
   B. Current is the same in all parts of a series circuit.
   C. Resistance is additive in series.
   D. That the sum of all the voltage drops around a circuit equals the applied voltage.

appearance

ir schematic

the Ohm's Law

nponents

ng voltage,

ircuit and

and ammeter

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drops around a

ge.

MATHEMATICS	C
UNIT 4 SIMPLE CIRCUITS	UNIT 4 SIMPLE CIRCUI
OBJECTIVES Students will be able to: 1. Use short cuts in handling very large numbers. 2. Use scientific notation. 3. Raise to powers and extract roots. 4. Use logarithms.	OBJECTIVES Students will b 1. Recognize their own. 2. Clearly ex 3. Use co-ord 4. Punctuate correctly. 5. Read and w

UNIT 4 SIMPLE CIRCUITS

OBJECTIVES

Students will be able to:

1. Recognize compound sentences and compose their own.
2. Clearly explain simple circuits orally.
3. Use co-ordinate conjunctions correctly.
4. Punctuate simple and compound sentences correctly.
5. Read and write essays.

LABORATORY	
4. Demonstrate in parallel circuits A. How to calculate R_t using three different formula B. That increasing the number of resistors decreases the total resistance C. That voltage is equal in a parts of a parallel circuit D. That current is additive in parallel circuits 5. Demonstrate how voltage and current are distributed in a complex circuit and calculate by applying lessons learned previously the various properties of the circuit	

OUTLINE

A. Components and symbols

B. Ohm's law

C. Series circuits

D. Parallel circuits

E. Combination circuits

F. Voltage dividers

G. Switches and switching circuits

	SCIENCE
ifferent istors of a lel circuits re distri- ate by he various	

MATHEMATICS	CO
OUTLINE	OUTLINE
A. Equations with fractional coefficients	A. Compound se
B. Scientific notation	B. Oral report
C. Ohm's Law	C. Co-ordinate
	D. Punctuation
	E. Essays
	1. literat
	2. writing

OUTLINE

A. Compound sentences

B. Oral reports

C. Co-ordinate conjunctions

D. Punctuation of simple and compound sentences

E. Essays

1. literature

2. writing

27

LABORATORY	
LEARNING ACTIVITIES 1. Lecture 2. Demonstration 3. Discussion 4. Experiments in workbooks 5. Lab work	

MATHEMATICS	CO
LEARNING ACTIVITIES	LEARNING ACTIVITIES
1. Logarithms as needed	1. Analyzing c
2. Use slide rule	2. Punctuation
3. Computations involving scientific notation	3. Study of es
	4. Library wor
	5. Writing ess

	COMMUNICATIONS
notation	LEARNING ACTIVITIES 1. Analyzing compound sentences 2. Punctuation drills on compound sentences 3. Study of essays in literature 4. Library work on essays 5. Writing essays

UNIT 5

MAGNETISM

UNIT 5

MAGNETISM

UNIT 5 MAGNETISM

OBJECTIVES

Students will be able to demonstrate or explain:

1. Properties of permanent magnets.
2. That magnets are surrounded by invisible magnetic fields and by the use of filings show that lines of force emerge from one pole of the magnet, pass through surrounding space and enter the other pole of the magnet.
3. The effect that current has on the magnetic field produced by current flow through a wire, the effect of an iron core and their current carring conductor, and using the iron filings technique determine the direction and shape of the magnetic field.
4. That the magetomotive force establishing lines of magnetic flux is proportional to ampere-turns of the coil.
5. That the resistance offered to the flow of magnetic

or explain:

invisible

of filings show

one pole of

ding space and

et.

he magnetic field

a wire; the

current carring

lings technique

e of the magnetic

ablishing lines

to ampere-turns

he flow of magnetic

MATHEMATICS	C
UNIT 5 MAGNETISM	UNIT 5 MAGNETISM
OBJECTIVES Students will be able to: 1. Change one unit of measurement to another. 2. Determine capacity of wires.	OBJECTIVES Students will be 1. Recognize own. 2. Verbalize, ciples of 3. Use subordi 4. Punctuate 5. Know the on simple

UNIT 5 MAGNETISM

OBJECTIVES

Students will be able to:

1. Recognize complex sentences and compose their own.
2. Verbalize, both orally and in writing, principles of magnetism.
3. Use subordinate conjunctions correctly.
4. Punctuate complex sentences correctly.
5. Know the technical vocabulary needed for units on simple circuits and magnetism.

another.

LABORATORY	
flux depends upon the material forming the magnetic path and that the resistance to flux flow of iron is very low compared to air. 6. That magnetic lines of flux pass with ease through non-magnetic substances, such as glass, as if the substance were not there at all. OUTLINE A. Permanent magnets B. Electro magnets C. Electro magnetic circuits 1. relays 2. solenoids 3. circuit breakers LEARNING ACTIVITIES 1. Lecture 2. Demonstration 3. Discussion 4. Experiments in workbooks 5. Lab work	

	SCIENCE
rning the tance to flux l to air. with ease such as glass, re at all.	

MATHEMATICS	C
OUTLINE	OUTLINE
A. Applications	A. Complex s
B. Measurements of	B. Reports o
1. Wire gauges	C. Subordina
2. Wire grades (net also)	D. Punctuati
3. Wire capacity	E. Technical
C. Review Ohm's Law	
D. Numerical trigonometry	
LEARNING ACTIVITIES	LEARNING ACTIVITIES
1. Checking wire with gauges and the application of Ohm's Law.	1. Analyzing
2. Work problems on Ohm's Law.	2. Punctuati
	3. Oral and
	4. Written c
	5. Discussin of magnet

S	COMMUNICATIONS
	OUTLINE A. Complex sentences B. Reports on magnetism C. Subordinate conjunctions D. Punctuation of complex sentences E. Technical vocabulary
e applica-	LEARNING ACTIVITIES 1. Analyzing complex sentences 2. Punctuation drills on complex sentences 3. Oral and written reports on aspects of magnetism 4. Written exercises on technical vocabulary 5. Discussing historical figures related to the study of magnetism

UNIT 6

METERS

UNIT 6

METERS

UNIT 6 METERS

UNIT 6 METERS

OBJECTIVES

Students will be able to:

1. Demonstrate by computation and actual construction how to design Ohmmeters, voltmeters, and ammeters.
2. Demonstrate the use of various meters and explain the precautions necessary when using each different type of meters.

OUTLINE

A. Voltmeter

B. Ammeters

C. Ohmmeter

ual

rs, volt-

ters and

when using

UNIT 6 METERS

OBJECTIVES

Students will be able to:

1. Use Ohm's Law
2. Read electrical meters

OUTLINE

A. Algebraic operations

B. Ohm's Law

C. Electrical measurements

1. Ohm
2. Volt
3. Amphere
4. Watts

UNIT 6 METERS

OBJECTIVES

Students will

1. Recogniz

compose

2. Write bu

a) appl

b) adju

c) opin

d) requ

3. Know the

ohm, vol

OUTLINE

A. Compound

B. Business

1. appl

2. adju

3. opin

4. requ

UNIT 6 METERS

OBJECTIVES

Students will be able to:

1. Recognize compound-complex sentences and compose their own.
2. Write business letters of various kinds:
   a) application
   b) adjustment
   c) opinion
   d) request
3. Know the derivation and history of the terms ohm, volt, and ampere.

OUTLINE

A. Compound-complex sentences

B. business letters
   1. application
   2. adjustment
   3. opinion
   4. request

LEARNING ACTIVITIES

1. Lecture
2. Demonstration
3. Discussion
4. Experiments in workbooks
5. Lab work

MATHEMATICS	C
	C. Derivatio 1. Ohm 2. volt 3. amphe
LEARNING ACTIVITIES 1. Meter reading 2. Simple graphing 3. Graphing AC durrent	LEARNING ACTIVITIES 1. Analyzing 2. Composing 3. Writing b 4. Addressin 5. Writing a letters o 6. Studying in region 7. Dictionar ampere.

C. Derivation and history of terms

1. Ohm

2. volt

3. amphere

LEARNING ACTIVITIES

1. Analyzing compound-complex sentences

2. Composing compound-complex sentences

3. Writing business letters

4. Addressing envelopes for business letters

5. Writing and mailing letters of opinion and letters of request

6. Studying letters of opinion which have appeared in regional newspapers or in news magazines

7. Dictionary work in library on Ohm, volt, and ampere.

UNIT 7

ALTERNATING CURRENT FUNDAMENTALS

UNIT 7

ALTERNATING CURRENT FUNDAMENTALS

LABORATORY	
UNIT 7 ALTERNATING CURRENT FUNDAMENTALS	UNIT 7 ALTER

OBJECTIVES

Students will be able to:

1. Demonstrate by computation and measurement with meters:
   A. The comparison of direct current and RMS (effective) values of alternating current.
   B. The peak, average, and effective values of alternating current.
2. Demonstrate the use of the oscilloscope to display the waveforms of AC and pulsating DC.

OUTLINE

A. Alternator theory

B. Alternating current values

C. Measuring alternating current

D. Use of Oscilloscope

sure-

nt and

rnating

ive values of

oscope to

ulsating DC.

MATHEMATICS	COM
UNIT 7 ALTERNATING CURRENT FUNDAMENTALS	UNIT 7 ALTERNATING CUR
OBJECTIVES Students will be able to: 1. Measure AC current. 2. Get acquainted with the nature of currents.	OBJECTIVES Students will be 1. Understand t agreement an illustrating 2. Recognize se use them in 3. Recognize ru them in writ 4. Discover the by well-know 5. Verbalize th the fundamen
OUTLINE A. Measuring alternating currents B. Calculating capacity of step-up and step-down transformers	OUTLINE A. Subject-verb B. Sentence fra C. Run-on sente D. Short Storie

UNIT 7 ALTERNATING CURRENT FUNDAMENTALS

OBJECTIVES

Students will be able to:

1. Understand the principles of subject-verb agreement and will write correct sentences illustrating correct usage.
2. Recognize sentence fragments and will not use them in writing.
3. Recognize run-on sentences and will not use them in writing.
4. Discover the enjoyment of reading short stories by well-known American authors.
5. Verbalize the function of transformers and the fundamentals of alternating currents.

OUTLINE

A. Subject-verb agreement

B. Sentence fragments

C. Run-on sentences

D. Short Stories

LABORATORY	
LEARNING ACTIVITIES 1. Lecture 2. Classwork 3. Performing experiments in Lab 4. Discussion	

MATHEMATICS	COMM
	1. O. Henry 2. William F 3. James Thu 4. Ernest He 5. Stephen V 6. Others E. Reports on tr
LEARNING ACTIVITIES 1. Solve problems by use of equations. 2. Additional graphing as needed. 3. Solve simultaneous equations.	LEARNING ACTIVITIES 1. Studying sent agreement 2. Composing sen agreement 3. Changing sent 4. Revising run- 5. Reading short 6. Searching for library 7. Listening to 8. Writing repor currents

	COMMUNICATIONS
	1. O. Henry 2. William Faulkner 3. James Thurber 4. Ernest Hemingway 5. Stephen Vincent Benet 6. Others E. Reports on transformers and alternating currents. LEARNING ACTIVITIES 1. Studying sentences with correct subject-verb agreement 2. Composing sentences with correct subject-verb agreement 3. Changing sentence fragments to complete sentences 4. Revising run-on sentences 5. Reading short stories 6. Searching for interesting short stories in library 7. Listening to short stories on record 8. Writing reports on transformers and alternating currents

UNIT 8

LAWS AND PROPERTIES OF INDUCTORS

UNIT 8

WS AND PROPERTIES OF INDUCTORS

LABORATORY	
UNIT 8 LAWS AND PROPERTIES OF INDUCTORS	UNIT 8 LAWS AND PROPE

OBJECTIVES

Students will demonstrate

1. Effects of inductance in dc and ac circuits
2. The high counter emf developed in a inductance when the current is interrupted
3. That when the dc current has reached a steady value, the inductance has no effect on current flow other than the inductors ohmic resistance.
4. Construction of a simple double wound transformer with an open core.
5. The significance of the voltage vs turns ratio of a transformer.
6. That INDUCTIVE REACTANCE (X_L) is the opposition offered to the flow of ac current in a circuit containing inductance and that it is measured in ohms.
7. That impedence (Z) is the opposition offered to AC current flow in a circuit containing both inductance and resistance and Z is also

circuits

inductance

d a steady

on current

resistance.

nd transformer

turns ratio

e opposition

n a circuit

s measured

n offered to

ning both

also

MATHEMATICS	C O
UNIT 8 LAWS AND PROPERTIES OF INDUCTORS	UNIT 8 LAWS AND PROP
OBJECTIVES Students will be able to enrich their knowledge of theory electricity.	OBJECTIVES Students will b 1. Capitalize 2. Use period quotation 3. Explain in of inducto

	COMMUNICATION
2	UNIT 8 LAWS AND PROPERTIES OF INDUCTORS
wledge	OBJECTIVES Students will be able to: 1. Capitalize reports and sentences correctly. 2. Use periods, commas, apostrophes, and quotation marks correctly. 3. Explain in writing the laws and properties of inductors.

LABORATORY	
measured in ohms. 8. That the phase angle between voltage and current depends on the magnitude of X_L in circuit. OUTLINE A. Theory of Inductance B. Series and Parallel combinations C. Inductive Reactance D. Mutual Inductance E. Transformers LEARNING ACTIVITIES 1. Lecture 2. Classwork 3. Performing experiments in Lab 4. Discussion	

and

X_L

MATHEMATICS	CO
OUTLINE A. Measurement of E. M. F. B. Measurement of induced currents C. Formulas for electricity	**OUTLINE** A. Capitalizati B. End punctuat 1. period 2. questio 3. exclamat C. Commas D. Apostrophe E. Quotation ma F. Reports on
LEARNING ACTIVITIES 1. Investigate circuits 2. Series circuits 3. Parallel circuits 4. Series-Parallel combinations	**LEARNING ACTIVITIES** 1. Studying exa in electroni 2. Practice wor 3. Using film s

OUTLINE

A. Capitalization

B. End punctuation

1. period

2. question mark

3. exclamation mark

C. Commas

D. Apostrophe

E. Quotation marks

F. Reports on inductors

LEARNING ACTIVITIES

1. Studying examples of correct capitalization in electronics text book

2. Practice work on capitalizing words in sentences

3. Using film strips on correct use of periods,

MATHEMATICS	COM
	commas, apost
	4. Practice worl
	5. Writing repor principles of punctuation a

commas, apostrophes, and quotation marks

4. Practice work on using correct punctuation

5. Writing reports on inductors in which all the principles of correct capitalization and punctuation are observed

UNIT 9

LAWS AND PROPERTIES OF CAPACITORS

UNIT 9

S AND PROPERTIES OF CAPACITORS

LABORATORY	
UNIT 9 LAWS AND PROPERTIES OF CAPACITORS	UNIT 9 LAWS AND P

OBJECTIVES

Students will demonstrate:

1. That capacitors will pass ac and block dc.
2. That capacitors connected to a DC source of voltage will charge up to the value of the applied voltage.
3. That charged capacitors are voltage sources capable of giving an electrical shock.
4. That the direction of charge and discharge currents are opposite in polarity.
5. That the time it takes for a capacitor to charge up is dependent upon the RC product in seconds, where R is in ohms and C is in farads.
6. That X_C is the opposition offered to alternating current by a capacitor measured in ohms.
7. That Z is the opposition offered by a capacitor and resistor in a circuit measured in ohms.

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roduct

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ed in ohms.

capacitor

ohms.

MATHEMATICS	COM
UNIT 9 LAWS AND PROPERTIES OF CAPACITORS	UNIT 9 LAWS AND PROPER
OBJECTIVES Students will be able to: 1. Graph sine wave 2. Understand phasors 3. Use rectangular and Polar coordinates	OBJECTIVES Students will be 1. Use colons, and parenthe 2. Write a brie 3. Spell and de with capacit

UNIT 9 LAWS AND PROPERTIES OF CAPACITORS

OBJECTIVES

Students will be able to:

1. Use colons, semi-colons, hyphens, dashes, and parentheses correctly.
2. Write a brief research paper.
3. Spell and define terminology associated with capacitors.

LABORATORY	
8. That the phase angle between voltage and current depends on the magnitude of X_C.	

OUTLINE

A. Capacitor theory

B. R-C time

C. Capacitor action in DC circuits

D. Capacitor action in AC circuits

E. Capacitors in series and parallel

	SCIENCE
and current	

MATHEMATICS	C
OUTLINE	OUTLINE
A. Trigonometry	A. Punctuatio
B. Mathematics of the sine	1. colon
C. Review E. M. F.	2. semi-c
	3. hyphen
	4. dash
	5. parent
	B. Reaearch p
	1. Choosi
	2. Findin
	3. Taking
	4. Writin
	5. Footno
	6. Writin
	7. Writin
	C. Terminolog

OUTLINE

A. Punctuation marks

1. colon
2. semi-colon
3. hyphen
4. dash
5. parentheses

B. Reaearch paper

1. Choosing a topic
2. Finding bibliographic resources
3. Taking notes
4. Writing rough draft
5. Footnoting
6. Writing a bibliography
7. Writing the final copy

C. Terminology associated with capacitors

LABORATORY	
LEARNING ACTIVITIES 1. Lecture 2. Classwork 3. Performing experiments in Lab 4. Discussion	

MATHEMATICS	COM
LEARNING ACTIVITIES	LEARNING ACTIVITIES
1. Set up circuits	1. Drill work dashes, and
2. Parallel	2. Use of film tion marks
3. Series	3. Illustratio correct pun
4. Combinations	4. Talk by lib research
	5. Work in lib
	6. Film strips
	7. Practice wo entries
	8. Written eval associated

	COMMUNICATIONS
	LEARNING ACTIVITIES 1. Drill work on colons, semi-colons, hyphens, dashes, and parentheses 2. Use of film strips to teach use of punctuation marks 3. Illustrations of changes in sentence meaning if correct punctuation marks are not used 4. Talk by librarian on resources available for research 5. Work in library on research papers 6. Film strips on writing research papers 7. Practice work on footnotes and bibliography entries 8. Written evaluation on knowledge of terminology associated with capacitors

UNIT 10

TUNED CIRCUITS

UNIT 10

TUNED CIRCUITS

LABORATORY	
UNIT 10 TUNED CIRCUITS	UNIT 10 TUNED CI

OBJECTIVES

Students will be able to demonstrate:

1. That resonance occurs when the X_L and X_C become equal.
2. That frequency of resonance (fo) = $\frac{1}{2\pi\sqrt{LC}}$
3. The effects of varying the frequency of the applied voltage above and below resonance.
4. The importance of the Q of the circuit and how it is related to bandwidth and frequency discrimination.
5. That at series resonance, I_{line} is maximum, Z is minimum.
6. That at parallel resonance, Z is maximum and I_{line} is minimum.
7. That combinations of inductor and capacitors can be used to shunt unwanted AC voltages and pass desired AC/voltages.

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frequency

maximum,

ximum and

apacitors

ltages and

MATHEMATICS	CO
UNIT 10 TUNED CIRCUITS	UNIT 10 TUNED CIRCU
OBJECTIVES	OBJECTIVES
Students will be able to:	Students will
1. Understand inductance	1. Recognize
2. Understand complex circuits	2. Know the suffixes.
	3. Use synon lary buil
	4. Understan American

UNIT 10 TUNED CIRCUITS

OBJECTIVES

Students will be able to:

1. Recognize means of improving their vocabularies.
2. Know the meanings of prefixes, roots, and suffixes.
3. Use synonyms, antonyms, and homonyms as vocabulary builders.
4. Understand and appreciate the writing of modern American poets.

LABORATORY	
OUTLINE A. Resonance B. Series resonance C. Parallel resonance D. Filter circuits	

M A T H E M A T I C S

OUTLINE

A. Algebra

B. Equations in two unknowns

C. Quadratic equations

OUTLINE

A. Vocabu

1. th

2. th

3. th

B. Attack

1. pr

2. ro

3. su

C. Synony

D. Antony

E. Homony

F. Americ

1. Ro

2. Ca

3. Em

4. Ja

5. Ot

OUTLINE

A. Vocabulary building

1. through wide reading

2. through conscious study

3. through puzzles and games

B. Attacking new words

1. prefixes

2. roots

3. suffixes

C. Synonyms

D. Antonyms

E. Homonyms

F. American poets

1. Robert Frost

2. Carl Sandburg

3. Emily Dickenson

4. James Weldon Johnson

5. Others

LABORATORY	
LEARNING ACTIVITIES 1. Lecture 2. Classwork 3. Performing experiments in Lab 4. Discussion	

MATHEMATICS	CO
LEARNING ACTIVITIES	LEARNING ACTIVITIES
1. Refresh trig operations	1. Discussion a
2. Refresh quadratics	2. Discussion a
3. Refresh equations - 3 unknowns	3. Work on cros
	4. Game day (Sc
	5. Written exer homonyms.
	6. Class dictio
	7. Records of m poetry.

	COMMUNICATIONS
	LEARNING ACTIVITIES 1. Discussion about value of large vocabulary 2. Discussion about means of vocabulary building 3. Work on crossword and other puzzles 4. Game day (Scrabble, etc.) 5. Written exercises with synonyms, antonyms, and homonyms. 6. Class dictionary work on vocabulary 7. Records of modern Americans reading their own poetry.

UNIT 11

POWER SUPPLIES

UNIT 11

POWER SUPPLIES

LABORATORY	
UNIT 11 POWER SUPPLIES	UNIT 11 POWER S

OBJECTIVES

Student will be able to:

1. Construct and explain theory of operation of half wave, full wave, and bridge rectifier circuits - expounding on advantages and disadvantages of each.
2. Construct and explain theory of operation of the different type of filter circuits such as C input, L input and π type filters and demonstrate advantages and disadvantages of each.

OUTLINE

A. Type
   1. half wave
   2. full wave
   3. bridge type

B. Filter circuits

ion

ctifier

d

ion of

ilters

ntages

MATHEMATICS	C
UNIT 11 POWER SUPPLIES	UNIT 11 POWER SUPPLIES
OBJECTIVES	OBJECTIVES
Students will be able to:	Students will be
1. Trouble - shoot (diagnose)	1. Understand
2. Do simple repairs	will be able
	essays.
	2. Write techni
	they have co
	3. Come to appr
	drama and wi
	author.
	4. Summarize ac
	and written
OUTLINE	OUTLINE
A. Additional algebra	A. Paraphrasing
B. Laws of sines and cosines	1. Reading
	2. Reading
	B. Technical re
	C. Drama

UNIT 11 POWER SUPPLIES

OBJECTIVES

Students will be able to:

1. Understand the meaning of paraphrasing and will be able to paraphrase paragraphs and essays.
2. Write technical reports describing projects they have completed during the year.
3. Come to appreciate the literary form of the drama and will read a play by a modern American author.
4. Summarize achievements for the year in oral and written form.

OUTLINE

A. Paraphrasing
   1. Reading and paraphrasing paragraphs
   2. Reading and paraphrasing essays
B. Technical reports
C. Drama

LABORATORY	
C. Regulation	
LEARNING ACTIVITIES 1. Lecture 2. Classwork 3. Performing experiments in Lab 4. Discussion	

MATHEMATICS	
	1. Chara 2. Moder D. Year's su
LEARNING ACTIVITIES 1. Disassemble motors 2. Rebuild motors	LEARNING ACTIVITIES 1. Practice graphs 2. Review of 3. Class dis 4. Library the lives a. Euge b. Tenn c. Other 5. Oral disc

	COMMUNICATIONS
	1. Characteristics of plays 2. Modern American playwrights D. Year's summary LEARNING ACTIVITIES 1. Practice in paraphrasing sentences and paragraphs 2. Review of requirements for technical reports 3. Class discussion of plays 4. Library work using encyclopedias to learn about the lives of playwrights. a. Eugene O'Neill b. Tennessee Williams c. Others 5. Oral discussion of years achievements

ACCESSION NUMBER: VT102220

PUBLICATION DATE: JUN75

TITLE: ADMINISTERING PUBLIC SERVICE OCCUPATIONS. AN IMPLEMENTATION GUIDE.

DESCRIPTOR: *CURRICULUM GUIDES; *PUBLIC SERVICE OCCUPATIONS; *CAREER EDUCATION; ADULT EDUCATION PROGRAMS; JUNIOR HIGH SCHOOLS; HIGH SCHOOLS; *PROGRAM GUIDES

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 176P.; RELATED DOCUMENTS VT 102 220 THROUGH VT 102 226 IN THIS ISSUE.

ABSTRACT: THIS IMPLEMENTATION GUIDE WAS DEVELOPED TO ASSIST IN THE INITIATION AND ADMINISTRATION OF PUBLIC SERVICE CAREER EDUCATION PROGRAMS. SUGGESTED GUIDELINES ARE INCORPORATED FOR ADMINISTRATORS AND TEACHERS INTERESTED IN IMPLEMENTING A PUBLIC SERVICE CURRICULUM AT THE JUNIOR AND SENIOR HIGH SCHOOL AND ADULT LEVELS. SPECIFICALLY, THIS DOCUMENT HAS BEEN PREPARED TO HELP LOCAL SCHOOL DISTRICT STAFFS UTILIZE THE SIX CURRICULUM GUIDES WHICH WERE DEVELOPED AS PART OF THE PUBLIC SERVICE OCCUPATIONS CURRICULUM PROJECT. THE AREAS EXPLORED INCLUDE ORIENTATION AND PREPARATION FOR PUBLIC SERVICE OCCUPATIONS. TOPICS COVERED IN THIS DOCUMENT ARE PLANNING AND ORGANIZING THE PUBLIC SERVICE PROGRAM, THE PUBLIC SERVICE CURRICULUM SYSTEM, WORK EXPERIENCE PROGRAMS, COMMUNITY INVOLVEMENT AND RESOURCES, AND ARTICULATION OF PUBLIC SERVICE PROGRAMS. (AUTHOR/LJ)

CONTRACT NUMBER: OEG-0-71-4780(357)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402. (STOCK NUMBER 017-080-01447-5)

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. VOCATIONAL EDUCATION SECTION.

SPONSORING AGENCY NAME: BUREAU OF OCCUPATIONAL AND ADULT EDUCATION (DHEW/OE), WASHINGTON, D.C. DIV. OF RESEARCH AND DEMONSTRATION.

VT 102 220

Administering Public Service Occupations

VT 102 220

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

Stock No. 017-080-01447-5

Administering Public Service Occupations

An Implementation Guide

by:

California State Department
of Education
Vocational Education Section
Program Planning Unit
Sacramento, California 95814

in accordance with:

U.S. Office of Education
Bureau of Occupational and
Adult Education
Division of Research and
Demonstration
Curriculum Development Branch
Grant No. OEG-0-71-4780 (357)

June, 1975

This document is one of a series of curriculum guides dealing with the Public Service Occupations career cluster. The titles of all individually available documents in this series appear below:

- Exploration of Public Service Occupations
- Orientation to Public Service Occupations
- Preparing for Public Service Occupations—Common Core
- Preparing for Public Service Occupations—Educational Services
- Preparing for Public Service Occupations—Law Enforcement Services
- Preparing for Public Service Occupations—Social Services
- Administering Public Service Occupations—An Implementation Guide

The project presented or reported herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

Developed pursuant to grant No. OEG-0-71-4780
by the California State Department of Education
Vocational-Technical Education Curriculum Laboratory
Sacramento, California
Funded by the U.S. Office of Education under
Part I - Curriculum Development in Vocational and Technical Education
Vocational Education Amendments of 1968,
Public Law 90-576
1975

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FOREWORD

This Implementation Guide has been developed to assist those involved in starting and administering public service career-education programs. Suggested guidelines are incorporated for administrators and teachers interested in implementing a Public Service curriculum at the junior, senior, or adult high school level.

Specifically, this document has been prepared to help local school district staffs utilize the six curriculum guides which are contained in the Public Service Occupations Curriculum Project. These guides cover the following areas:

Exploration of Public Service Occupations;
Orientation to Public Service Occupations;
Preparing for Public Service Occupations, Common Core;
Preparing for Public Service Occupations, Educational Services;
Preparing for Public Service Occupations, Social Services;
Preparing for Public Service Occupations, Law Enforcement Services.

The aforelisted guides, together with this document, were prepared by the Program Planning Unit, Vocational Education Section, California State Department of Education. The major responsibility for the coordination of material prepared for this Implementation Guide belongs to James J. Lynn, Curriculum Specialist, Public Service Occupations Curriculum Project.

A wide range of suggestions and approaches to the subject were received and, wherever possible, incorporated into the final document. Since the resulting materials represent the opinions of many people, no approval or endorsement of any institution, organization, agency, or person should be inferred.

Patrick J. Weagraff, Ed.D.
Project Director

ACKNOWLEDGEMENTS

The completion of this Guide has depended upon the assistance, advice, and cooperation of many individuals. The California State Department of Education, Vocational Education Section, Program Planning Unit, wishes to acknowledge in particular the contribution of the following individuals:

Victor A. Backstrom
Public Service Occupations Teacher
Long Beach, California

John Bunten, Senior Program Officer
Bureau of Adult and Vocational-Technical Education
San Francisco, California

Dr. William E. Burns
Professor of Education
State University College at Buffalo
Buffalo, New York

Dr. Ronald Detrick
Director of Career Education
San Diego Unified School District
San Diego, California

Irvin Gartner
Associate Director
Berkely Executive Seminar Center
Berkeley, California

Lucinda L. Kindred
Special Consultant
San Francisco, California

Alfred W. Koch
Curriculum Coordinator
Rawlins Public Schools
Rawlins, Wyoming

Andrew S. Korim
Public Service Specialist
American Association of Junior Colleges
Washington, D. C.

Fred Martinez, Consultant
Education for the Disadvantaged
California State Department of Education
Sacramento, California

James B. Mayo, Director
Fremont-Newark Regional Occupational Program
Fremont, California

James J. McIlwrath, Consultant
Office of Program Evaluation
State Department of Education
Sacramento, California

Fred Miller, Chief
Public Service Institute
Department of Education
Harrisburg, Pennsylvania

Paul N. Peters, Manager
Career Education Task Force
State Department of Education
Sacramento, California

Nadine Reid, Coordinator
Public Service Occupations
Curriculum Project
San Diego, California

Marion Woods, Special Consultant
Public Service Occupations Project
Sacramento, California

Dr. James Wykle
Education Program Specialist
U. S. Office of Education
Washington, D. C.

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INTRODUCTION

INTRODUCTION

PUBLIC SERVICE CAREERS

Approximately one out of every seven workers in the United States is employed in some Public Service occupation. All trends in local, state, and federal employment continue to indicate that a large number of new people will have to be educated and trained each year in the foreseeable future to enter government employment.

Demands for increased numbers of workers have, in turn, created a need for school curricula directed toward preparing individuals for these expanding opportunities. To help fill this growing need, Curriculum Guides have been prepared in the areas of Public Service occupations. As a further step, use of this *Implementation Guide* will help the administrator, teacher, or counselor transform these Public Service curriculum materials into a viable Program, for assistance in proper career choice and preparation for the students in the Program.

The materials contained in the various guides of the Public-Service Occupations Program are based on the premise that the selection of a career in Public Service should be done with an accurate understanding of the field. Occupational choice is not a matter of blindly taking a job, or of choosing a career at random; mistakes are far too costly in terms of time, energy, dollars, and personal fulfillment.

Career choice is a developmental process. It is not completed all at one time, but, rather, it is a complex task that requires careful study and sustained effort over a period of time. Career planning in the Public Service field requires an understanding of one's abilities, interests, aptitudes, and personality, as well as realistic knowledge of the changing world of Public Service. The mix must be a balanced one. Thus, appropriate selection of career possibilities within the major occupational groups of public service depends largely on the student himself.

Of course, no curriculum guide is a substitute for a trained teacher or counselor. Instead, this guide has been prepared as a supplemental tool which the teacher, counselor, or administrator may advantageously use in implementing a Public-Service occupations career-education program.

THE CAREER EDUCATION CONCEPT

The Public Service career family (or cluster) is a part of career education. It is one of the fifteen career clusters, designated by U.S.O.E., and comprising all occupations in the world of work. See Figure 1. The fundamental concept of career education is that all educational experiences, curricula, instruction, and counseling should be geared toward preparation for economic independence, while building an appreciation for the dignity of work. The Public Service Curriculum seeks to implement this career-education concept within the confines of the Public Service cluster.

The career-education concept has many of its roots in developmental psychology and vocational guidance. One of the key themes is the premise that vocational plans are not isolated events in an individual's psychological and educational life stages, but part of a continuous process of development. This emphasis suggests that career education should begin in the elementary school. An integrated, cross-disciplinary program in the regular school curriculum (K-12) is more in keeping with

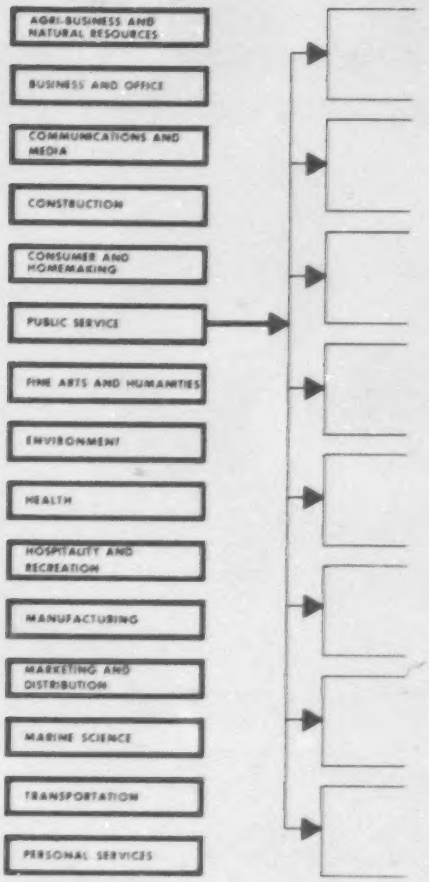

Figure 1 - U.S.O.E.-Designated Career Clusters

current theories for vocational development, than is the offering of an isolated unit or a course in the high school curriculum.

Figure 2 illustrates the basic concept that an ongoing career-education system increases in relevance throughout the years by focusing more and more sharply on intelligent career choice. Such a system gives students informed guidance, counseling, and instruction throughout their school years, with progressively more specialized instruction as the student advances into higher grades.

The career-education system demands no permanent bondage to a career goal; it offers the student a range of occupational

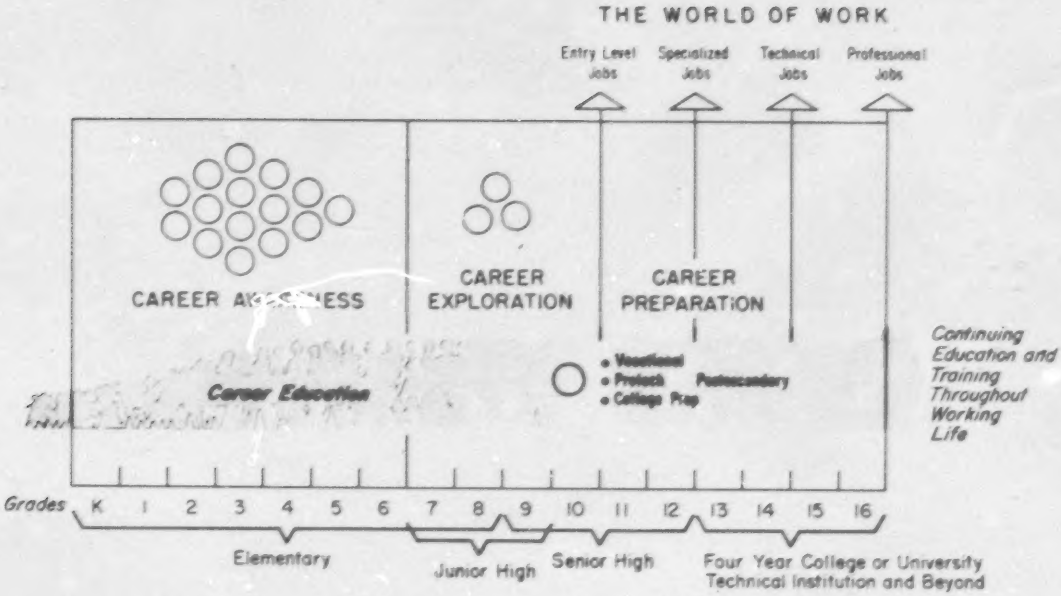

Figure 2 - Continuing Nature of Career Education

options, and helps to develop positive attitudes toward work.

The career-education system will enable nearly all persons who complete secondary school to be ready for immediate employment, or will provide the necessary impetus for continuing any required education in technical school or college. Thus, it could be possible for students completing the Orientation and Preparation Phases of the Public Service Occupations career family to enter Public Service at the local, county, or federal level; to continue their education at postsecondary institutions (college or technical institute); or to combine employment with additional education by evening or extension courses as required.

DEFINITION AND ANALYSIS OF PUBLIC SERVICE

A fundamental step in developing appropriate curricula for grades 7 to 12 and adult levels in the Public Service career family involved defining, appropriately and acceptably, the real meaning of Public Service. The Public Service Project staff, working in conjunction with a group of nationally prominent persons who have expertise in the fields of local,

state, and federal government, and also in secondary and post-secondary education, adopted this definition for Public Service:

> Public Service occupations are those occupations pursued by persons performing the functions necessary to accomplish the missions of local, state, and federal government, excluding the military service and trades requiring an apprenticeship. These missions reflect the services desired or needed by individuals and groups...and are performed through arrangements or organizations established by society, normally on a non-profit basis, and usually supported by tax revenues.

Examination of the major functions of government, consistent with this definition, suggests its division into eight major *occupational groups* which reflect discrete governmental functions performed at local, state, and federal levels. Figure 3 identifies these eight major occupational groups, with brief descriptions of their functions, and illustrates the major *job families* found in each occupational group.

A SYSTEMATIC LOOK AT THE PUBLIC SERVICE PROGRAM

A teaching program, properly structured to provide the basis for adequate career choice in these eight occupational groups, could logically be built around three major components:

- Basic content for a particular major occupational group;
- Student learning activities;
- Work observation and/or experience.

These components, as illustrated in Figure 4, supplement each other, all elements being necessary to provide comprehensive career planning.

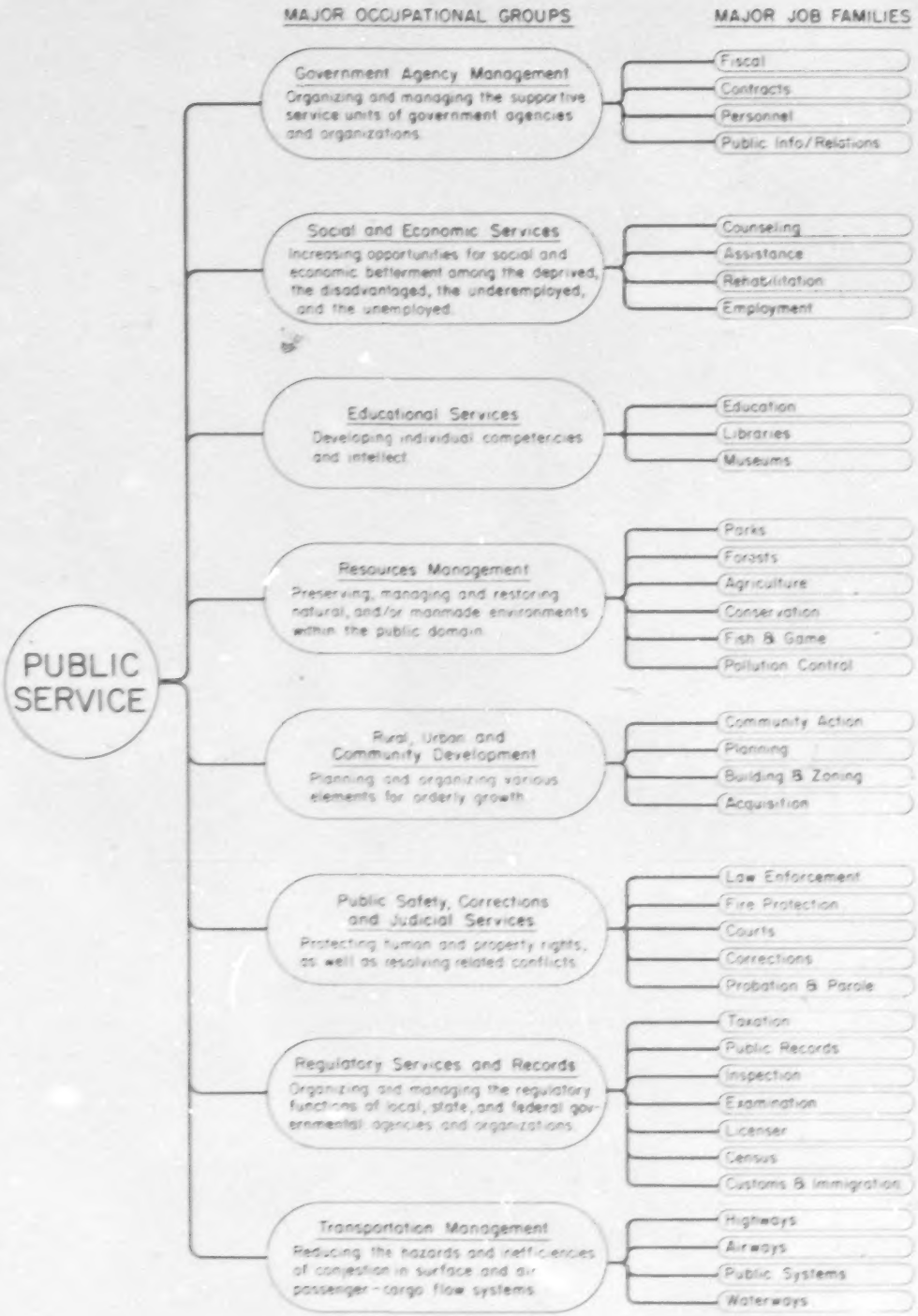

Figure 3 - Basic Occupational Groups - Public Service Cluster

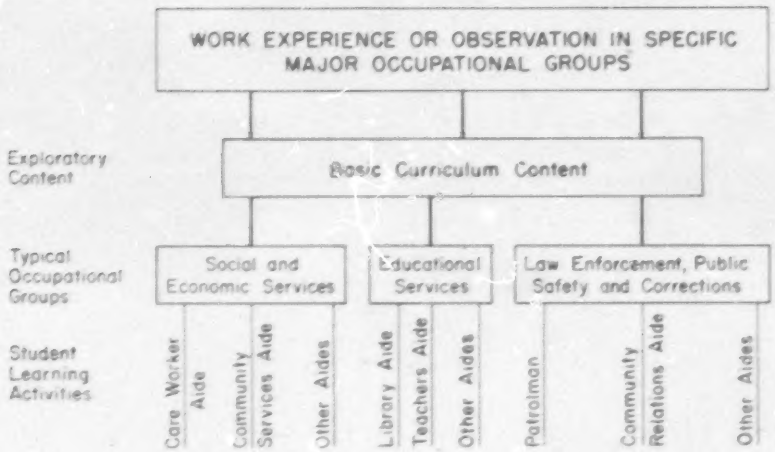

Figure 4 - Relationships of Learning Components In Public Service Occupations Curriculum

Figure 4 shows the relationship of these three components for three of the major Public Service Occupational Groups. (These learning components constitute but one phase of a career education program, of course.) The work experience and/or observation factor cuts across and influences all occupational groups in Public Service. The basic exploratory content for each of the eight major occupational groups discussed in the Curriculum Guides is built on this premise. This includes the broad aspects of the purposes, structure, organization, career lattices, and general knowledge of the field.

PROGRAM GOALS AND OBJECTIVES

GENERAL PROGRAM GOALS

The Public Service Occupations Curriculum Program was designed to accomplish the following general goals for the eight major occupational groups, within the concept of career-education:

- Acquainting students with Public Service occupations as a distinct career family;

- Developing favorable attitudes in students toward Public Service occupations and government work in general;

- Familiarizing students with the operations and functions of Public Service occupations;

- Showing the relationships between a variety of Public Service careers and different life styles of public servants;

- Familiarizing students with the operations and organizations of governmental structures.

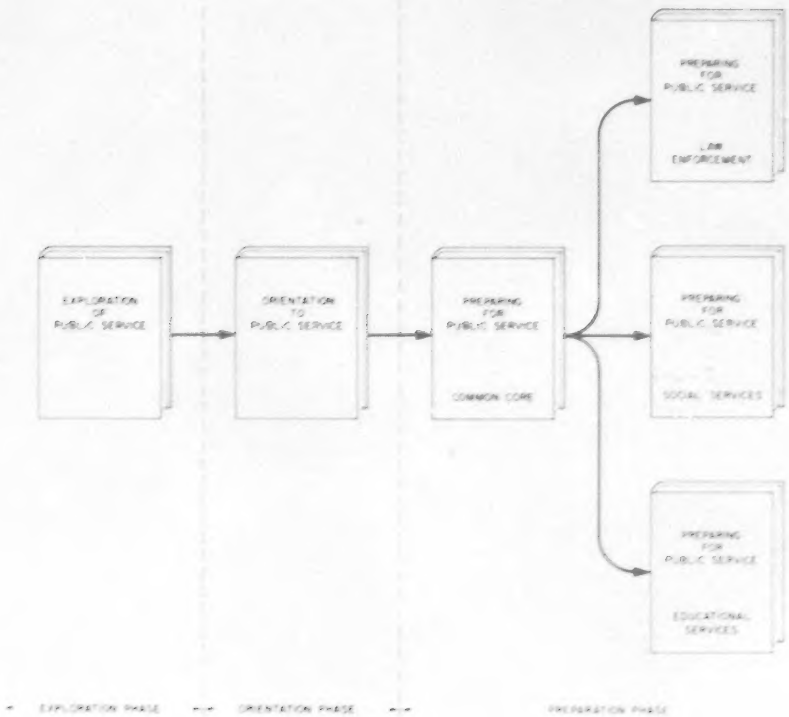

Figure 5 - Interrelationship of Curriculum Guides for the Public Service Occupations Program

In addition to these general goals for the total Public Service Program, more specific objectives were considered as applicable for the three distinct phases of the curriculum: The Exploration, Orientation, and Preparation Phases. The interrelationship of the Curriculum Guides for these various phases is indicated by the accompanying Figure 5, *Interrelationship of Curriculum Guides for the Public Service Occupations Program.*

PROGRAM OBJECTIVES FOR THE PUBLIC SERVICE OCCUPATIONS CURRICULUM GUIDES

Exploration Phase Objectives - The Exploration Phase (grades 7-9) of the Public Service Program is based upon these broad objectives:

- Acquainting students with the purposes and functions of Public Service occupations;
- Introducing students to the variety of careers found in governmental service;
- Showing the relationships of the student's aptitudes, interests, and values to careers in Public Service;
- Increasing the relevancy of school subjects to occupational skills in Public Service.

Orientation Phase Objectives - The Orientation Phase (grades 9-11) of the Public Service Program has the following objectives:

- Giving students in-depth orientations to the eight major occupational groups within the Public Service career family;
- Providing students (through basic course content, learning activities, and work observation or experience) a basis for making tentative career choices concerning Public Service careers.

Preparation Phase Objectives - The Preparation Phase (grades 11-12 and Adult) of the Public Service Program includes these general objectives:

- Enabling students through both classroom and work experience opportunities to make realistic decisions about work in the Public Service career family;

- Preparing students for entry-level work in Public Service occupations;

- Equipping students with a "common-core" of skills, attitudes, and competencies for success in Public Service careers;

- Equipping students with entry-level speciality skills in one or more of these Public Service Occupational Groups:
  - Social services,
  - Educational services,
  - Law-enforcement services.

INSTRUCTIONAL OBJECTIVES OF THE GUIDES

In addition to the above, the instructional units within each of the curriculum guides also have instructional objectives. These curriculum objectives are related directly to the content, student/teacher activities, and pre-post tests for each instructional unit. The particular instructional objectives of the total Public Service Program, as chosen by any one district or school, will depend on many factors. These are among the more important considerations:

- The level of instruction (junior, senior, or adult high school);

- The choice of the curricular system (infusion or separate subject);

- The level of the philosophical commitment to career and vocational education in general, and Public Service occupations in particular;

- The attitude and commitment of the selected staff to the Public Service Program.

The local educational agency can, therefore, choose those instructional objectives it feels are most appropriate for meeting its student's needs. It is then up to the Public Service instructor to translate these broad curriculum goals into more specific behavioral objectives. The curriculum level instructional objectives, it should be remembered, are suggested guidelines. No teacher is expected to fully cover every objective in every unit of instruction. Rather, it is hoped that each educational user will set realistic instructional goals and measurable behavioral objectives for the Public Service students.

PROGRAM VALIDITY

TESTING AND EVALUATION

Reports of the Advisory and Review Committee accompany the Curriculum Guides, appraising the activities of the second and third years of program activity. As shown by these reports, the Public Service Occupations Curriculum Guides are well tested and validated educational products. Over 4,000 students participated in a three-year pilot-testing program of these materials in a number of test sites, demonstrating the workability of the Guides over a wide variety of secondary-school settings. The eight Public Service pilot-test sites, located in New York and California, were selected because of:

- different geographic locations,
- varying population ages,
- urban and rural environments,
- public and private school systems, and
- varying ethnic and racial composition.

The Curriculum Guides appear to be flexible enough to accommodate students from a variety of backgrounds. No significant differences in program effectiveness or student learning gain were found between the eight test sites.

The main purposes of the pilot test evaluations were to judge

the usability and usefulness of the Curriculum Guides. In order to effectively evaluate both the curriculum *product* and *process*, the testing was conducted as a combination of both objective and subjective measures, with two major results:

- The first result involved modifications where appropriate in the curriculum content. The present Curriculum Guides reflect these changes;

- The second result is this *Implementation Guide*. Suggested procedures for developing, implementing, and maintaining a Public Service program, as found in this document, are the outgrowth of the pilot-testing programs. The most successful practices and procedures of the pilot-testing program are, therefore, contained herein. Its use will help the administrator and teacher to utilize practical, field-testing guidelines in establishing proper methodology to implement a successful Public Service Occupations Program.

Validation of Guides

The Curriculum Guides themselves contain a high degree of face validity and content validity. That is, the Guides appear on the surface to cover the Public Service career family; in fact, they actually do accurately cover the content purported to be covered.

Content validity was accomplished through jury panels of Public Service experts. Separate jury panels examined the content of each of the Curriculum Guides, making revisions and/or modifications when necessary. Therefore, the Curriculum Guides not only appear valid on the surface (an important psychological factor for the curriculum users), they are also conceptually sound, containing a high degree of curricular validity. The fact that the Guides both *look accurate*, and in fact *are accurate*, adds to their acceptance and usability.

Administrators involved with managing the Public Service test sites were interviewed extensively concerning the administrative feasibility of the Public Service Program. Information was obtained through investigation of several administrative areas:

- Budget factors,
- Personnel requirements,
- Facilities and schedules,
- Equipment and materials, and
- Coordination with other activities.

It should be mentioned that none of the test sites received any additional or special financial support for implementing a Public Service program. The solutions that these administrators found should, therefore, be easily transportable to most local educational agencies. Administrators expressed themselves as greatly pleased with the Public Service Program from a *support services* point of view. This *Implementation Guide* reflects many of the techniques and solutions devised by the test-site adminstrators for Public Service Program implementation.

In addition, it is notable that over 800 persons from twenty-one states were involved in the conceptualization, development, and evaluation of the Public Service Occupations Curricula. These guides are thus the end-result of a truly national scope of activity.

PRODUCT USABILITY

Another aspect of the Public Service Program validity which

needs to be mentioned is its product usability. The curriculum materials were found to be usable in both the classroom and the local community. The objectives, content, student learning activities, and teacher management activities, were found to be easily adaptable to local classroom and community needs at the test sites.

Evaluation questionnaires were completed by both teachers and students to evaluate curriculum usability. In addition, the Public Service Project staff interviewed teachers, administrators, and students concerning their evaluation of usability. It was discovered that the reading level of the guides is appropriate for the use of teachers, and that the content is relevant to both teachers and students.

In addition, the pre- and post-tests were found to be accepted and used by the teachers to help in assessment of student learning gain.

A majority of the students involved in the pilot testing reported that the Public Service Program helped them to make more realistic and informed career decisions.

The Public Service Project staff, in conjunction with a third-party evaluation team, found that teachers and administrators also concurred on the usability and usefulness of the curriculum materials.

STUDENT LEARNING GAIN

A final aspect of program validity deals with student learning gain. Based on difference scores between pre- and post-tests, it was obvious that there was a very real gain from the Public Service Program in the case of the demonstration-site students. Post-test scores were significantly higher at all demonstration sites than pre-test scores for the same demonstration site

students. In addition, interviews and project staff observations confirmed the pre-post test results...that students did acquire new knowledge, skills, and attitudes as a result of participating in the Public Service Program.

In summary, the Public Service Occupations curriculum has been well tested, and action research has been carried out on the effectiveness of the program. The content is valid, the students do learn from the program, and the curriculum works equally well in a wide variety of situations, particularly if implemented as generalized below.

GENERALIZED IMPLEMENTATION

The teachers responsible for the Public Service Occupations curriculum do not need to be experts in every occupational group covered, but they are encouraged to familiarize themselves to the greatest extent possible with the material presented. Through this effort, they can better understand and build on the students' experiences and comments, thus accelerating more general discussion, with extrapolation into other related topics.

The material in the guides may be used in many ways. The instructors may desire to use portions of the content as the basis for development or structuring of their own programs. A wide assortment of techniques is presented:

Situation dramas,	Field trips,
Films,	Group discussions, and
Debates,	Readings.
Outside speakers,	

The wise instructor will manage these activities in a coherent program to fit the students' needs, blending classroom efforts with work experience and/or observation. The major limitation on teaching is the ingenuity of the instructor.

Some of the individual sections in the Guides may require

additional content or activities, particularly if one section is to be emphasized over others. Accordingly, many of the instructional resources identified in the Guides are of a type which will permit teachers to build upon the materials contained in each section.

Instructors may want to follow these suggestions:

- When the need arises, call in outside experts who can expand on a particular section;

- Accompany students on field trips for additional information or experience;

- Request that students do the necessary legwork and "research" on certain topics. The instructor might profitably spend time before the start of the program learning what the community has to offer in terms of field trips, materials, experts, and other resources.

- Adopt a flexible approach in teaching, by allowing the discussion to flow from student interests and concerns, rather than following a planned sequential program.

Developmental research needs to be done on long-term results as related to students who graduate from Public Service Occupations Program. It is recommended that local educational agencies set up a system to periodically follow-up on their students after graduation. When such large-scale longitudinal studies have been completed, definitive statements can then be made with assurance about the ultimate success of the Program.

Chapter 1

PLANNING
THE PUBLIC SERVICE PROGRAM

Chapter 1

PLANNING THE PUBLIC SERVICE PROGRAM

PROGRAM DEVELOPMENT

In the development of a program of Public Service Occupations, there are several important items to consider during the planning phase. The first step in the planning process is to identify and assess local needs.

NEEDS ASSESSMENT - STUDENT NEEDS

The needs assessment should be learner-based. That is, it should focus upon the student of the educational system rather than the system resources. Conducting a needs-assessment study is a different and demanding part of the planning process, requiring both in-depth knowledge of the present, and a forecast of the future. A needs study which is properly done is concerned with the ends or outcomes of a Public Service Program, rather than the means for attaining those ends. Look for *what ought to be*, and compare with *what is*. The difference between *what is* and *what ought to be* identifies the need.

A variety of models are available for assessing needs. a review of assessment models used throughout the United States and Canada was conducted by the Information Retrieval Center, of the Northern Colorado Educational Board of Cooperative Service, Boulder, Colorado. The bibliography in this *Implementation Guide* contains these resources and others which describe typical

needs-assessment models. Based on information compiled in the bibliography, together with a review of materials in a number of libraries, the following suggestions are offered as a guide in designing a needs-assessment study for implementing a Public Service Occupations Program:

Model Planning for Needs Assessment

The needs-assessment model must:

- be capable of generating and distinguishing between learner and institutional needs;
- consider all aspects of education;
- produce data in standard formats that are comparable by regions and statewide;
- be capable of validating needs in quantifiable terms;
- generate validated needs in a format that makes them immediately useful in the long-range planning efforts.

The needs-assessment strategy should answer these questions relative to planning, management, and resources:

- Have sufficient funds been alloted to adequately accomplish a comprehensive educational needs assessment?
- Has involvement in the planning been both district- and department-wide?
- Is the district or department, and the county office of education (or all of these local counterparts) committed to the needs assessment and its potential results?

The strategy used should meet these criteria:

- Does the overall concept of educational needs assessment define an educational need as the difference between the current status of the learner and the desired learner outcomes?

- Does the assessment strategy include both long- and short-range objectives?

- Are student learning goals established for the purpose of determining children's needs through the needs assessment?

- Are the student learning goals behaviorally stated and representative of cognitive, affective, and psycho-motor learning?

- Does the strategy include provisions for a data sample from which reliability can be determined? (that is, are we measuring accurately and consistently?)

- Does the strategy include provisions for a data sample from which validity can be determined? (that is, are we measuring what we purport to measure?)

- Does the needs-assessment strategy include provisions for collecting appropriate information on specific sub-populations?

- Does the strategy include provisions to assure that the data collected are manageable and current?

- Can the conclusions drawn from the interpretation of data be supported?

Data Requirements for a Public Service Model

In developing a Public Service Occupation Program, information must be gathered from:

- the students who are interested in public service occupations, and

- the community, to determine opportunities and requirements for public service employment.

(Be prepared to define *public service*, since many students and teachers will not be completely familiar with this term.)

A survey of student interest and needs is a crucial area in the program design. The students, the school, the public service employers, and others involved, will all be dissatisfied and uncomfortable with the program and its results if it fails to accommodate the specific needs of interested students. Therefore, inclusion of students in the program (from the planning stage to actual implementation) is a must.

A unique feature of the Public Service Occupations Program is that it has sufficient flexibility to meet the varying needs of career education, college preparatory, general educational, and vocational educational students, as well as students with special needs.

An important consideration is that selection of the students in the program should, in large measure, be based on their interest in the Public Service field. It is imperative that counselors must be totally aware of the Public Service program. This will greatly enhance student recruitment. It is notable that this program will function equally as well with students identified as *educationally disadvantaged* as with those in a regular program.

NEEDS ASSESSMENT - COMMUNITY NEEDS

When the needs and career aspirations of the students are identified, a survey of the community should be made to:

- determine the opportunities for employment in the occupational cluster of apparent interest to the students;
- determine whether a sufficient number of local Public Service agencies are capable and willing to cooperate in the program;
- determine acceptablity of the Public Service Occupational Programs;
- accumulate information for use in teaching Public Service occupations and career development.

After the needs of the students and the community have been identified, it is recommended that each *need* identified in the assessment be carefully documented with facts in order to properly perform problem analyses and determine priorities. Alternative solution strategies should then be selected, and a detailed plan should be developed to implement the Public Service Program and evaluate the results.

PROGRAM STAFFING

STAFFING REQUIREMENTS

Staffing requirements for the Public Service Occupations Program should be determined by the local school district according to local policies and state credentialing requirements. The nature of Public Service Occupations programs requires that personnel concerned with the instruction or administration should have depth of experience and knowledge in the general area of Public Service occupations. The Program stresses the need for the same characteristics considered essential to good teaching

(including such traits as enthusiasm, warmth, willingness, and flexibility).

The following suggestions might be considered as essential in establishing program staffing requirements:

- A commitment to the career education concept in general, and a specific commitment to Puolic Service occupations. These commitments indicate the recognition that career education is focused upon the learner and his needs, and that Public Service occupations are involved with (and indeed a part of) the community.

- Successful career education programs require input from various agencies, industries, and businesses. An essential characteristic of all program staff would be an ability to work with (and through) committees, and to make and utilize group and individual contacts.

- It may be that certification will alter the source of instructors; however, the skills and competencies of the instructors should not be compromised.

- The Public Service Occupations instructor should be strong in the written and oral communications skills, and be able to teach these skills to the Public Service Occupations student.

- Other essential requirements of Public Service staff members include the ability to facilitate and coordinate activities that will help to unify efforts between the school, the home, and community agencies. At the senior high school level, the staff should be prepared to provide work-experience opportunities for the students. This facilitation and coordination involves the development of flexible programs and schedules, giving consideration to needs of school,

employer, and home, and providing opportunities for the students to participate in the program. Often the instructor may need to utilize certain *aggressive coordination* techniques.

- Recent work experience in a Public Service Occupational area is viewed as a plus for the teacher. Such experience would help to provide the teacher with an insight into the operation of a Public Service agency. Considerable work experience with Public Service agencies could be an alternative to traditional *subject centered* credentialing.

- Consideration should be given to teaching assistants, since they are valuable for either individual, small group, or large group instruction.

Teacher selection is of such great importance that it needs further discussion. The Public Service Occupations teacher needs to be effective in the classroom, capable of representing the district in the community, innovative in arranging field experiences for the students, and able to communicate to the students an understanding of how government functions. The teacher should have advance knowledge of the urgent need to generate large numbers of contacts in the community. The Public Service instructor will soon get to know many of the local and regional governmental agency managers.

The Teacher's Role

A Public Service Occupations Program will be successful only when the staff are aware of and committed to the variety of tasks needed to be performed. The selection of the teacher is the most important decision to be made. Without an energetic, dedicated, and creative teacher, the Public Service Program will not be truly successful.

The teacher carries the primary responsibility for maintaining

the program, motivating the students, and providing sound teaching and leadership for the Public Service Occupations Program. As examples of suggested activities, the Public Service Occupations teacher should visit Civil Service offices and obtain sample applications, job announcements, and other available public-information materials. Public service job announcements and applications are excellent bulletin-board material. Teachers should request that they be placed on the mailing list of Public Service Agencies for all future job announcements.

Academic preparation in a given area appears to be secondary to the teaching abilities and the teacher's interest in public service. The approach to teaching Public Service Occupations is a local option. As with any new program, the needs of the students being served and the resources of the local district determine the staffing requirements.

Thus, the subject area speciality of the teacher is not as important as a positive attitude that will create a positive learning experience. The teacher must be innovative in order to make the best use of the materials and the community resources. This requires careful planning and a creative approach to learning.

The teacher is the key to a successful program, and must be knowledgeable of the students and the curriculum. In addition, the teacher must have detailed and current information on each of the Public Service Occupations. The Public Service Occupations Curriculum Guides provide an excellent outline around which the teacher can organize classroom activities. (The fact that these materials are curriculum *guides* cannot be overemphasized. The teacher must adapt these guides to meet local needs, not adopt them in full.)

The Counselor's Role

The counselor's role is greater than merely programming the proper students into the class or advising them of the occupational opportunities. Counselors should advise students concerning additional electives that would be of value in a Public Service career, and courses that must be taken for enrollment in a post-secondary training program. The counselors in the secondary schools need to develop procedures to aid in the articulation process. This should include horizontal articulation with other programs in the high school, and vertical articulation from high school to junior high school and post-secondary institutions. The vital link between the high school and post-secondary experience will be much easier and relevant for the students if the counselors establisn meaningful articulation procedures.

Counselors have a significant and important role to play in the development and successful operation of any new program. This is no less true when planning a Public Service program. Incoming students need to have the school's entire curriculum explained to them. The counselors often must do this, since the teachers have their responsibilities in the classroom. Students do gain much of their knowledge about curriculum from one another. However, when a new program is introduced, it falls upon both teachers and counselors to relay the information to the students.

The Administrator's Role

Administrators have major responsibilities in the implementation of Public Service Occupations classes. A philosophical commitment to Public Service as a curriculum is necessary. They must select the teachers for the program, provide the classrooms, make the budget allotments, and approve purchasing of supplies. Moreover, the success of the program is largely dependent upon

the administration providing the required time for the teachers and counselors to make necessary contacts with agencies and other educational institutions. Administrators must realize that Public Service instructors need to allocate substantial portions of their time for setting up and maintaining advisory committees.

In addition (and importantly), the administrators must devise viable strategies for determining priorities and alternatives to meet the needs of the community (students, parents, employers) as schools plan for educational change. A discussion of *Needs Assessment: Community Needs*, has been previously presented in this Chapter.

Administrators in the public sector recognize that policy-making decisions are vested in those usually elected to positions of authority. Further, the public or the community retains the right and privilege to change its policy-makers. In the educational system, policy-makers ordinarily do not have tenure. The present-day administrators can thus ill afford to make important educational decisions without due consideration for the power structure of the community. Those charged with the management tasks should not isolate nor insulate their responsibilities from the environment responsible for the institution's existence.

To accomplish this interaction, well-informed administrators utilize the services of advisory committees, citizen's groups, and special interests groups to aid them as they function outside the power structure. Use of such groups can pave the way for effective communication with the balance of the community, and make an important difference between success or failure of the Program.

Suggested procedures for formation and utilization of such an Advisory Committee, as well as its role and functions, are

therefore the subject of detailed consideration herein; see Chapter 5, *Community Involvement*. The specific role of the administrator or teacher in effectively dealing with such a group is also covered in Chapter 5.

Chapter 2

ORGANIZING THE PUBLIC SERVICE PROGRAM

Chapter 2

ORGANIZING THE PUBLIC SERVICE PROGRAM

ORGANIZATION CONCEPTS

The Public Service Occupations Program needs to be organized and managed within the context of the total education program. This Program, if organized properly, should contribute significantly to the successful attainment of student career objectives.

An interdependent Public Service Program is one which complements and supports other educational programs. Flexibility is needed if the school system is to effectively mobilize and utilize required resources. The painless integration of the Public Service Program into the total educational system should be a major goal of the organizers of the Public Service curriculum. Thus, Public Service functions should be structured in such manner that program coordination, correlation, and consolidation within the total educational program are all optimized.

PROGRAM COORDINATION

The process of coordinating a Public Service Occupations Program calls for monitoring numerous efforts of various individuals. The major functions or activities which might be coordinated are shown in Figure 6.

- The planning function will be conducted by the administrative staff. Once Public Service instructors have been selected, they should be involved in the planning process;

FUNCTIONS	KEY TASKS
Planning	Conduct student interest survey; Conduct Public Service employer availability survey; Write policies, standards, and instructional goals; Assist with budget development; Assist with scheduling program; Select Public Service Occupations teaching staff.
Promoting	Engage in public-relations activities; Prepare reports and other information releases of interest to the public; Recruit students for Public Service classes.
Coordinating	Organize Advisory Committee, and be certain it is functioning well; Arrange student interviews and placement with approved Public Service employers; Coordinate in-school instruction and on-the-job experience; Develop student schedules; Assist students to obtain work permits, Social Security cards, and health certificates; Confer with Public Service employers at regular intervals, and visit students on the job.
Instruction	Provide in-school related instruction: recruit students, prepare and teach courses, arrange facilities, provide teaching materials, seek other learning opportunities.
Counseling	Confer with students about personal and Program problems; Recruit students; Confer with other teachers about student progress; Confer with parents and/or guardians; Supervise and coordinate youth-group activities.
Evaluating	Determine readiness of students for cooperative program; Perform continuous planned evaluation of the total Program; Develop community employment profile; Conduct follow-up studies of graduates;

Figure 6 - Major Functions or Activities to be Coordinated in Organizing a Public Service Occupations Program

- Administrators, teachers, and counselors will need to promote the Public Service program; the entire staff should ideally be involved in the promotion function;

- Coordinating the program will also require the joint efforts of administrators, teachers, and counselors;

- The Public Service instructor will be primarily responsible for the instruction function;

- The counseling staff will be responsible for counseling related activities. However, the teachers and counselors should work closely together on both the student recruitment and career development aspects of the Public-Service curriculum;

- Evaluation of the program should also be a joint effort of the educational staff. Community involvement and/or third-party evaluators help to strengthen this function.

STUDENT RECRUITMENT

This section will be of primary interest to those educators who plan on having separate or *tack-on* courses called *Exploring Public Service*, or *Orientation to Public Service Occupations*. Instructors of these separate courses will need to actively find and sell students on Public Service. If, on the other hand, it is planned to *infuse* the Public Service Curriculum into the existing curricula, no real recruitment is necessary! However, even if the infusion approach is used, some of these student recruitment suggestions can be of valuable motivational use to the teachers and counselors.

Student recruitment deals with the active selling of Public-Service educational programs to students. As mentioned earlier, one of the first things to be done is to define the meaning of *Public Service*, since many students are simply not familiar with this term.

Student recruitment will be discussed under three major student populations:

- General education students (including college preparatory students),
- Vocational education students,
- Students with special needs.

GENERAL EDUCATION STUDENTS

Public Service Occupations is not a special class for a special kind of student. Students in the *Exploration* and *Orientation* phases of the Public Service classes usually have opportunities to visit agencies, meet persons, read materials, and view films that spell out the entry-level occupations and identify the governmental agencies in which they are found. Students in the *Preparation* phase will very likely couple their classroom training with some forms of cooperative work experience.

Student recruitment, for the general educational or college preparatory student, should be done on an individual basis, or within small groups, if possible. The counselor or teacher should have the opportunity to inform the students of the manner in which the Public Service Occupations Course is designed to meet their individual needs. This recruiting interview also provides the teacher and counselor with an opportunity to collect necessary information from the student. The questions asked, and the interest indicated during the recruitment interviews, will help to determine the type of Program the teacher should plan and present. It should be explained to the students that their education and experience largely determine the type of career they will have in Public Service. The students should realize that many Public Service Programs can be continued at the post-secondary level.

Therefore, there is no reason why college preparatory students should not be recruited into the Public Service Program.

Recruiting from Secondary Schools

Awareness and exploration of the Public Service career cluster should be started earlier, in elementary or junior high school. More enthusiasm regarding career choices should be generated prior to high school. By explaining to junior high school students the importance of choosing a career early, and by introducing the fifteen career clusters that the U. S. Office of Education has identified, students will be given an opportunity to start thinking about careers in general.

If *Exploration of Public Service Occupations* is a separate "mini-course" in junior high school, students will have to be recruited at this level also. After the concept of career education is implemented, students will very quickly begin placing priorities, eliminating occupations, and making more informed choices regarding careers.

In recruiting students from junior high school for classes in *Exploration of Public Service Occupations*, the Public Service teacher (or counselor) should visit the feeder schools. The Public Service recruiter should explain what Public Service means, and how the class is designed to help the student learn about the wide range of occupations available in governmental services.

Most students know, or have heard the term *Civil Service* used, but only know that it is some type of work for the government. They usually do not know that almost any kind of occupation found in private employment can also be found in governmental services. In making a presentation regarding Public Service Occupations, it is best to start with a *baseline position* with which all students are familiar.

Many students do not realize that their parents help to provide the salaries paid to Public Service employees; that they help to pay public servants' salaries by the taxes that they pay. Students can be shown that those who work for the government are helping to pay their own and others' salaries, as well as helping to make the laws that control government.

Recruiting for Post-Secondary Level

At the senior high school level, recruitment can be enhanced by articulating the Public Service Program with post-secondary institutions. Showing students post-secondary options for further Public Service training can help to improve their view of the desirability of Public Service occupations. The recruitment effort should be geared to the appropriate educational level. Obviously, senior high school recruitment will place a greater emphasis on skill preparation and job training than will junior high school recruitment. Similarly, with academically-oriented students, the post-secondary level Public Service occupations will be stressed over the entry-level positions.

Recruiting at Meetings

Student recruitment could also be done at Parent-Teacher meetings, since the parents are then in a position to actively help the student in making a choice. The parents will also receive information regarding the Public Service Program, and they, themselves, might wish to enroll in similar classes at the adult level.

VOCATIONAL EDUCATION STUDENTS

It is important for Public Service teachers to know the reasons why students enroll in their class. Some students will take the class for an elective credit to fulfill the requirements

for high school graduation. In spite of this fact, the majority of vocational educational students recruited will be searching for an occupation in Public Service. Different students will be looking for different goals in a Public Service class. By being aware of this during recruitment or during the class scheduling period, the teacher or counselor will certainly help to eliminate errors in programing. The Public Service recruiter does not want to place a student on a contract or in a group which will not meet the student's needs. If the student takes the class for an elective and realizes that it is possible to get more from the class than he anticipated, then there is still time left to plan an individual program for this student. Since the Public Service curriculum guides are easily adapted, the curriculum allows all the flexibility needed to accomplish this.

Yet the students help you organize the class. Students can be effective Public Service recruiters for future classes. Let those students with leadership ability invite public employees to visit their classes as speakers. Let the students offer suggestions for field trips and ask Public Service speakers if they will make their resource material available for classroom use. Persons with entry-level jobs are especially good to invite to the classroom. In most cases these persons are younger and talk the kind of language students can identify with.

Police officers, fire fighters, park rangers, and other "uniformed" public servants should come to class in their working uniforms. Their presence on the school campus is one form of student recruitment for future classes.

Public Service classes should be informative and fun. A person who makes a decision about a career or an occupation should have the opportunity to choose the type of occupation that will not only satisfy financial needs, but also be interesting and rewarding. Public Service is interesting and viable. Recruit-

ment for Public Service classes should reflect the interesting and varied life styles of public servants.

STUDENTS WITH SPECIAL NEEDS

As noted earlier in this section, Public Service Occupations Classes are not specially established for special kinds of students only. Recruitment for the junior or senior high school student in grades 7-12 with special needs does not need to be any different from that of the general or vocational education student. Physically, mentally, or emotionally handicapped students, or educationally disadvantaged students, can benefit from a Public Service program. Some students with special needs will need to develop good test taking skills. Written tests and oral interviews are required for most entry level positions in Public Service.

The Public Service Occupations Curriculum is appropriate for students with special needs. Student assignments should be carefully planned and made for the individual student, since the needs of educationally disadvantaged students will vary considerably. Some students may be disadvantaged culturally, others economically, or still others socially.

It is not necessary to recruit and program students who have special needs any differently than for any other students. It is important, however, to know the special needs of all atypical students, whether they are low achievers, culturally or economically deprived, handicapped, or slow learners.

Recruitment for disadvantaged or handicapped students will probably be more successful in small groups rather than in large group settings. Small group recruitment sessions improve communication, and more information regarding the program can be given in such informal settings. In order to plan a program for disadvantaged or handicapped students in a regular class,

the teacher needs to know first each student's reading level. This should be considered by the recruiter.

Realizing the problems that sometimes exist in motivating academically, culturally, or economically disadvantaged persons, the Public Service recruiter needs to make a special recruiting effort. Public Service Agencies have a long history of fairness and equal opportunity in hiring practices. Handicapped or disadvantaged persons can be successful in Public Service if given the proper training and encouragement. Recruiting efforts should reflect this attitude.

RECRUITING TECHNIQUES

The following techniques may be of assistance in recruiting, and also help to make the education program responsive to the needs of all students:

- Form a sub-committee within the Advisory Committee to consider the special needs of students, and to plan and implement a program of work;

- Know the organizations and Agencies that teachers and administrators may contact to help coordinate programs and services for the disadvantaged;

- Become familiar with Agencies which may be contacted to increase coordination of programs and services for the handicapped;

- Search for methods of mainstreaming disadvantaged and handicapped students so that each will receive adequate preparation for entry into the world of work;

- Determine and list employment opportunities for disadvantaged or handicapped youths and adults;

Figure 7 - Cover of Typical Recruitment Brochure

- Identify community businesses willing to accept student trainees who are disadvantaged or handicapped;

- The circulation of leaflets is also a good recruitment technique. The leaflet's main focus should be on the various groups covered, job families, entry-level positions, and what the training program will include. Figures 7 and 8 are taken from *Training For Tomorrow Today, Public Service Occupations*, a recruitment brochure used in a senior high school. Such a brochure might include such information as:
  - The wide range of occupations available in government,
  - How to find and apply for a position with the government,
  - Qualification requirements for the various civil service jobs,
  - What to expect in a civil service oral interview,
  - How to evaluate occupational information,
  - Geographical locations of the major centers of civil service employment in the area;

The Public Service Occupations course is designed to prepare students for those civilian occupations pursued by persons carrying out the mission of the federal, state, county or local government.

The functions of government have been divided into eight occupational groups or clusters. These clusters are found in all levels of government. Examples from each of the groups are listed:

1. Educational Services
   A. Libraries
   B. Museums
   C. Schools
2. Public Safety, Corrections and Judicial Services
   A. Police Protection
   B. Fire Science
   C. Probation and Parole
3. Social and Economic Services
   A. Welfare
   B. Employment
   C. Counseling
4. Resource Management
   A. Forestry
   B. Parks
   C. Pollution Control
5. Regulatory Services and Records
   A. Motor Vehicle Registration
   B. Customs and Immigration
   C. Taxation
6. Governmental Agency Management
   A. Personnel
   B. Public Relations
7. Rural, Urban and Community Development
   A. Community Action
   B. City Planner
   C. Building and Zoning
8. Transportation
   A. Airways
   B. Waterways
   C. Highways

THE TRAINING PROGRAM WILL TEACH STUDENTS:

- The wide range of occupations available in government;
- How to find and apply for a position with the government;
- Qualification requirements for the various civil service jobs;
- What to expect in a civil service examination;
- What to expect in a civil service oral interview;
- How to evaluate occupational information;
- Geographical locations of the major centers of civil service employers in this area;
- Practical applications of concepts from U.S. Government, psychology, sociology, and other disciplines related to specific occupations.

WORKERS MAY START AS:

- Aides
- Paraprofessionals
- Skilled Workers
- Professionals (with continued training)

THOSE WHO CONTINUE TO DEVELOP THEIR CAPABILITIES MAY GO INTO FIELDS SUCH AS:

Supervision and/or Management

YOU WILL RECEIVE GOVERNMENT II CREDIT UPON COMPLETION OF THIS COURSE

Figure 8 - Typical Textual Content of Recruitment Brochure

- When recruiting for Public Service Occupations Programs, the student should be informed of the advantages offered by Public Service. Some of these advantages are:

  - Job security,
  - Counseling,
  - Equal hiring and promotion opportunities,
  - Regular work hours,
  - Extra pay or time-off for overtime,
  - Salary comparable to similar jobs in business and industry,
  - Pay raises and regular cost-of-living increases,
  - Rewards for outstanding employees,
  - Vacations,
  - Sick leave,
  - Paid holidays,
  - Retirement,
  - Group insurance.

It may appear that the recruiter is giving students a lot of information to digest. However, this is not the case. Remember, the recruiter is only scratching the surface of the real meaning and importance of Public Service.

SUPPORT SERVICES

An effective Public Services Occupations Program should be interesting and motivating for students. The resources which are available to the Program often determine whether students' interests and motivations are maintained at a high level. Some suggestions are listed below to help the Instructor obtain material resources and human resources for support of the program. These few suggestions may save the teacher and/or administrator both time and money:

- Review the Curriculum Guides carefully and note the lists of references;

- Utilize the list of resources available in the immediate area, and compare it with the suggested list in the Guides;

- Establish a separate list of those resource materials which you have identified as available in the pertinent area;

- Contact the Public Service Agencies in your community and inquire about material they might have available;

- Review all available film catalogs and list those which are appropriate for Public Service;

- A large quantity of commercially-produced material exists which can be useful;

- Your career or vocational counselor can be your best resource friend. Counselors are continually receiving free materials;

- Be sure to check your library or media center for materials before you buy--this may help you get the most for your material budget money;

- Make use of the employment center for job application, civil service exams, and job announcements--they will provide good experiences for students;

- Utilize the *Occupational Outlook Handbook* of the Department of Labor--it can be a tremendous source of information.

The human resources which are available can be an additional valuable support service. Several key points should be considered when utilizing outside speakers;

- Contact the person at least two weeks in advance. Initial contacts can be made two months in advance;

- Explain completely what you want the speaker to accomplish;

- Make every effort to allow the students to talk to workers with entry-level jobs rather than the high-level Public Service executives.

- Develop and utilize a form which will state (in writing) the time, place, activity, person contacted, and the type of information needed. This will help to prevent long discussions on material not pertinent to the student needs;

- Contact many community people and establish a list of persons willing to act as resources;

- Try to articulate your use of resource people with other related courses. There are many programs in a school system and overuse of one person may have bad results. Coordinate as much as possible with other programs;

- The other side of the coin is also true. If you commit a speaker's time, make sure that you utilize it. Cancellations can create negative impressions.

Other support services which are essential include the areas of scheduling and transportation:

- *Scheduling* is essential for the students involved in the program and also for the instructor. It is suggested that a most appropriate time for classes is just before or after lunch. The lunch period is then utilized, when needed, for field trips and other types of off-campus activities. The last class period of the day is a good second choice for scheduling Public Service classes.

- *Transportation* could be a problem area. A major consideration involved is the availability of transportation for field trips. At the senior high school level, you may want to assign a vehicle to the program. Another consideration is the need for funds to provide advanced students with transportation to Public Service job sites.

Job Stations are another critical concern. Some public service

agencies are involved in maintaining confidential records. This may be a limiting factor in the availability of work stations.

Another limiting factor is the potential disruption of service that is sometimes associated with student work stations. Be prepared to *sell* Agencies which are reluctant to create work stations by stressing the benefits of the Public Service Program to the Agencies.

PROGRAM EVALUATION

Ongoing and systematic evaluation is necessary for the improvement, continuation, and expansion of Public Service Occupations Programs. It is also necessary to evaluate the Program relative to the community's need, and what is required of the institution to determine:

- The desired educational objectives in terms of things to be learned;
- The type of services to be rendered, both instructional and non-instructional;
- The policies and techniques for implementation of the Program.

A direct outcome of a continuous evaluation process with staff involvement should be a naturally better match between goals and results.

Generally, evaluation or follow-up data may be used for such purposes as these:

- As a basis for modification of the curriculum in terms of graduate employment and job skill information;
- To show employment trends and job mobility;
- To determine additional educational programs needed by former students;

- To determine the effectiveness of the guidance department and other special services;

- To justify the continued existence of a current program;

- With legislative committees to show the effectiveness of programs such as the Public Service Occupations Program;

- To upgrade the public image of vocational training;

- To show the services provided to people by the Public Service Occupations Program;

- Use of the data for publicity purposes.

EVALUATION PROCEDURES

Evaluation procedures should be selected in the early planning stages of the Program. An evaluation model found to be successful in evaluating Public Service establishes methodology for the evaluation process simultaneously with agreement on viable *measurable objectives*. Program evaluation should include both *product* and *process* evaluation; the former measures student outcomes, while the latter is designed to evaluate the effectiveness of the total program.

Other Public Service test-site evaluators have made valuable suggestions, such as:

- Evaluation of the program should be made in terms of the school philosophy and program goals;

- Program evaluation should be a group endeavor;

- A variety of measurement techniques should be used to secure needed data;

- Self-appraisal should be a part of the evaluation program;

- Evaluation findings and recommendations should be disseminated (but with tact and courtesy) to interested persons;

- Evaluation data should serve as a basis for planning immediate changes and developing long-range plans.

Great emphasis should be placed on the interpretations of findings; therefore, it may be appropriate to employ a third-party evaluation service to obtain an unbiased estimate of Program effectiveness.

Follow-up Procedures from Former Students

Methods should be developed to identify procedures for collecting information from former students that can be used to assess the effectiveness of school programs and services. These suggested tasks may help to implement this activity:

- Organize a committee to plan and promote follow-up activities. This committee may be composed of the school administrator, placement coordinator, guidance coordinator, vocational director, teacher(s), and Cooperative Education Coordinator.

- Develop a pre-graduation follow-up instrument to collect basic information from students, and administer it prior to their departure.

- Conduct group guidance sessions to explain how follow-up information will be collected and used.

- Develop follow-up instruments for one-year, three-year, five-year, ten-year follow-ups; and for non-returning students.

Follow-up Procedures for Employers and Educational Representatives

It is also desirable to obtain evidence that will contribute to knowledge about former students' employment and educational competence and to maintain communications with other educational institutions and industry. These tasks may help to implement this activity:

- Identify employers of former students by asking appropriate questions on follow-up questionnaire.
- Develop employer and institutional follow-up questionnaires.
- Notify former students by mail that their employers and colleges will be contacted as a part of the follow-up services of the school.
- Mail questionnaires with a cover letter to the employers and colleges. Letter should be personalized and reference should be made to each former student.
- Conduct personal interviews with selected employers and college representatives to collect specific job and educational information.

REPORTING FOLLOW-UP INFORMATION

After the acquisition of the basic data, follow-up findings should be transformed into workable evidence for use in measuring the effectiveness of school services and for use in program revision. These tasks may help to implement this activity:

- Prepare a report to describe the follow-up activities and to summarize the findings.
- The compilation and analysis of student follow-up data and

the organization of the final report are determined by the original purpose and objectives of the study. Data must be compiled and analyzed so that information and comparisons about the various parts of the vocational program are clearly presented.

- The use of tables, charts, and graphs may be used to improve clarity and understanding.

- Findings of the follow-up study should be supplied to all persons interested in or responsible for any part of the school program, including administrators, school board members, vocational teachers, "general" education teachers, counselors, regional supervisors, and the State Department of Education.

INTERPRETING FOLLOW-UP INFORMATION

Following the analysis of data and preparation of the final report, a difficult and important part remains--comparing the information against original program objectives, identifying implications for the local program, and suggesting program modifications. To achieve these tasks, the following strategy is suggested:

- Involve all persons - Everyone involved in the Public Service program must be included in the data interpretation process (i.e., program planning and evaluation committees, school faculty, school administrators, advisory committees, students, parents, and employers).

- Local director should assume leadership - The Director of the Program should assume responsibility for presiding over a joint meeting and insuring that everyone has received a copy of the follow-up report several days prior to the session.

- Involve the Advisory Council - Utilizing the follow-up infor-

mation to evaluate the effectiveness of the training program is a task that cannot be done in isolation from the work world. Several members of the Advisory Council may employ graduates of the Program and are aware of strengths and limitations in the training program. They can lend their special expertise in translating student follow-up data into needed Program modifications and changes.

- Evaluate Program in terms of its objectives - Each Program area, guidance services, and job placement service should be evaluated. Decisions concerning Program adjustments should be based upon follow-up data secured in terms of the program's ability to achieve its original objectives. Program objectives which appear inappropriate or unachievable should be revised.

- Prepare abstracts of follow-up reports for distribution to news media and appropriate groups or organizations.

Evaluation and follow-up procedures should result in providing to the various public groups served by the organization information and data, based upon which they can make valid decisions pertinent to financial or moral support.

Chapter 3

THE PUBLIC SERVICE CURRICULUM SYSTEM

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RELATIONSHIP BETWEEN GUIDES AND USOE MODEL

The career-education concept, as discussed in the Introduction to this Guide, is pervasive, and should permeate the total curriculum, with its real beginning in the elementary grades, where students can readily develop an understanding of the range of occupations in government service. However, it is recognized that this is very difficult to achieve; consequently, it is anticipated that the *Public Service Curriculum Guides* will find optimum usage in the junior and senior high schools, in adult education, and in continuation high schools. Students at these levels are at crucial decision-making stages of development, and can use these materials most advantageously. This section of the *Implementation Guide*, therefore, is intended to provide a number of possible methods of implementing the curriculum, with emphasis upon their inclusion in the junior and senior high school level classes. It is the goal of this implementation to help the students to be ready for immediate employment, or to provide a firm base for further education.

As previously indicated, the *Public Service Occupations Curriculum Guides* include the following components:

- Exploration of Public Service;
- Orientation to Public Service;

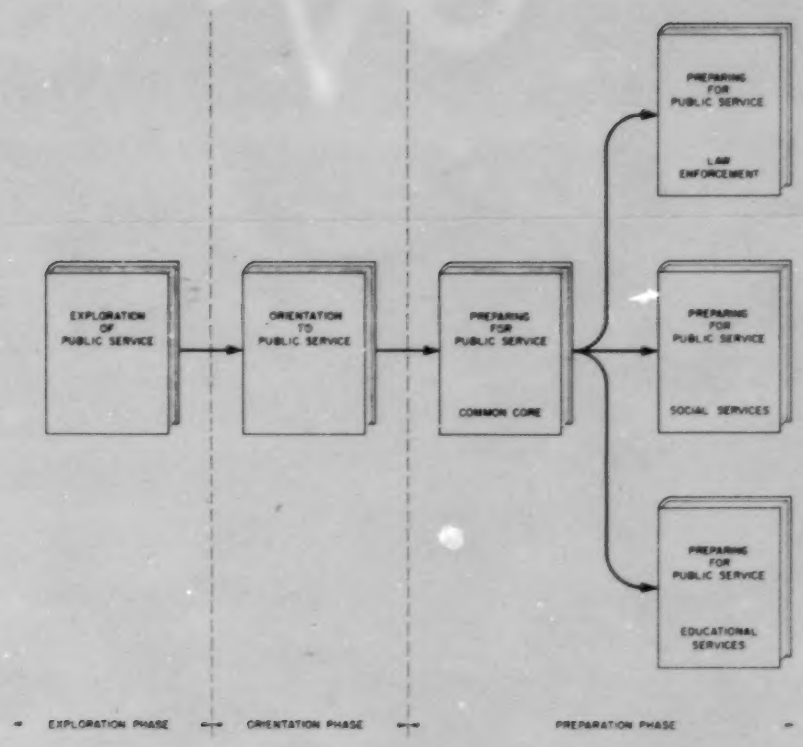

Figure 9 - Interrelations of Curriculum Guides for the Public Service Occupations Program

- Preparing for Public Service Occupations; Common Core;

- Preparing for Public Service Occupations, Specialty Cores:
  - Law Enforcement
  - Social Services,
  - Educational Services.

The sequential relationship of the curriculum is shown in Figure 9 (previously shown as Figure 5). It will be noted that, in this Figure, an Orientation Phase has been added between the Exploration and Preparation Phases, to amplify the system previously shown in Figure 2.

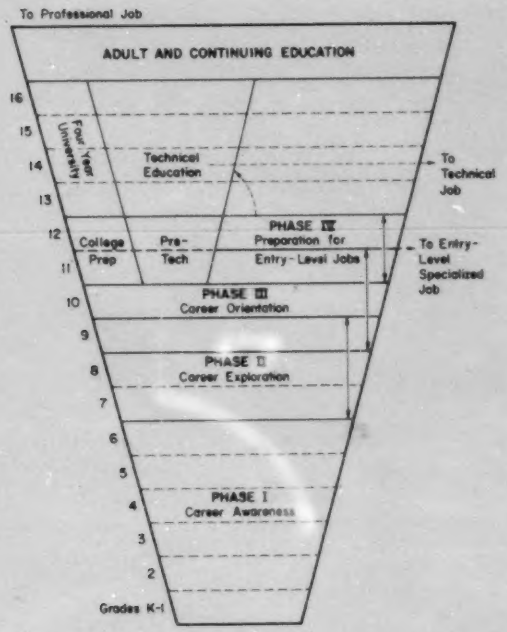

Figure 10 - U.S.O.E. Comprehensive Career Education Model

The sequence of the Public Service guides closely follows the United States Office of Education's (USOE) model. Figure 10, representing a comprehensive Career Education System, shows the USOE's four phases of career education:

- Phase I, "Career Awareness," covering grades K-6;
- Phase II, "Career Exploration," covering grades 7-9;
- Phase III, "Career Orientation," covering grades 9-11;
- Phase IV, "Career Preparation," which has three components:
  - entry-level job preparation, grades 11 and 12, and adult;
  - technical-level job preparation, grades 13-15;
  - professional job preparation, grade 16 and above.

Comparison of Figures 9 and 10 indicates a close relationship between the Public Service Curriculum System and the career-educational model.

	Elementary Grades	Early Secondary 7-10	Late Secondary 11-12
Objectives of Implementation	Develop an awareness of the occupational world.	Stimulate occupational interests, and provide exploratory and pre-vocational experiences in the Public Service Occupational area.	Provide specialized training for a specific occupation or a grouping of closely related occupations.
Depth and Scope of Implementation	Develop general understanding, with unrestricted exposure to all fields of work.	Gain acquaintance with many specific occupations, primarily through study of job families. Opportunities should be provided for student to obtain practical experience.	Provide training for Public Service job-entry skills and admittance to more advanced training; (Sheriffs Academy, etc.).
Suggested Method of Implementation	No materials developed at this time. Infusion method of implementation should be used when materials are developed.	*Exploration of Public Service, Orientation to Public Service.* The method used may be either a separate course or unit, or preferably infused into a social studies or guidance class.	*Preparing for Public Service (Common Core, Law Enforcement, Social Services, Educational Services).* Implementation may be by separate courses, or by infusion into existing programs. Mini-courses are another suggestion at this level. Field (work) experiences should be part of the curriculum.

Figure 11 - Suggested Implementation Methodology

The *Exploration Guide* is designed for use in Phase II, the *Orientation Guide* is designed for use in Phase III, and the *Preparation Guides* are designed for use in Phase IV of the student's education. Students completing the Preparation materials should be able to obtain entry-level work in Public Service, and be prepared for further post-secondary work, if they so desire.

INCLUSION OF CURRICULUM INTO SCHOOL'S SYSTEM

As a first step in implementation of the Public Service Occupations Curriculum, a decision must be made as to how and where it should be included in the school's curriculum system. While the career-education concept seems to offer optimum educational

advantages, nevertheless it is recognized that financial and administrative considerations of the local district will be the major motivating factors in the final decision. Regardless of the plan adopted, it is suggested that the curriculum materials be utilized in general accordance with the methodology of Figure 11, and should meet the objectives shown thereon.

IMPLEMENTATION BY PHASES

IMPLEMENTATION OF THE EXPLORATION PHASE

The activities in the exploration guide, *Exploring Public Service Occupations*, were designed to be appropriate and appealing to students of the junior high school level. They provide a discussion focused around a basic Public Service concept. This narrative content is then followed by student activities simulating problems and events encountered in a Public Service occupation. This guide provides students with an opportunity to explore their interests, abilities, and desires relative to Public Service occupations. Each unit is compact and could easily be infused into a number of different junior high school classes. Social studies, English, and guidance classes (career planning or educational planning) are logical places in which to introduce the guide, *Exploration of Public Service Occupations*.

The infusion method has a number of advantages at the junior high school level. It exposes all of the students enrolled in the social studies or English classes to the Public Service curriculum. Students entering senior high school would then be better informed about Public Service programs at that level.

If Public Service was introduced as a separate class, or as an elective, only a small percentage of the student body would be enrolled.

Infusion also solves the problem of student recruitment. The students are already programmed into the required classes in which the curriculum is being introduced. There are no addi-

tional class scheduling problems with an infusion approach.

This is not to suggest that there will be no problems with an infusion approach. When the infusion approach is utilized, there are many more teachers that need in-service training. More teachers will need to change their lesson plans and to modify their course outlines. Some of the teachers may be reluctant to make these changes. However, the *Exploration Guide* materials should prove to be a great help to the teachers when they utilize them.

The *Exploration Guide* materials will be motivational in the sense that they do relate to the students' interests, plans, and (in some cases) occupational interests. The Public Service Curriculum activities will assist the student in understanding the relevance of the academic class to the world of work. The *Exploration Guide* may also assist the student in planning his senior high school program.

IMPLEMENTATION OF THE ORIENTATION PHASE

The Guide, *Orientation to Public Service Occupations,* has already been implemented in several ways. In some demonstration sites, the material has been infused into the regular curriculum, while it has been field tested, equally successfully, as a separate course in other sites.

The purpose of this component of the curriculum is to provide the student with an in-depth exposure to the major occupational groups within the area of Public Service. This goal may be realized through either method of implementation. The fact that both infusion and separate-subject models have already been developed and field tested demonstrates the flexibility of the *Orientation Guide.* The method of implementation to be adopted by a District for this curriculum will have to be formulated on the basis of its present curriculum and class

schedule, whether modular, rotating, or traditional.

There are also key decisions to be made concerning the *Orientation Guide* and the infusion system of implementation. In addition to revising course outlines, and retraining teachers, decisions must be reached regarding which courses shall be revised, what content deleted, and who shall be responsible for infusing the Public Service Occupations Curriculum into the on-going program of the school. Such changes in curriculum may need to be approved by a curriculum committee and the Board of Education.

Furthermore, methods of teaching may need to be changed. Significant portions of the content to be taught may be communicated to students most advantageously by field experiences or by guest speakers from the occupations under investigation. The methodology of utilizing community resources ought to be a major consideration when initiating a new Public Service Occupations class:

- What governmental agencies will permit field trips?
- How often will they send one of their officials to the school as a guest speaker?
- Will they cooperate with the school in establishing an exploratory and/or vocational work experience program?

Answers to these questions may have a definite bearing upon the type of program that a district establishes.

When the Public Service Occupations Orientation Curriculum is offered as a separate course, the teacher may find it easier to develop a working relationship with community resource people, than when the curriculum is infused into an existing system and there are a large number of teachers involved. It

is also likely that the students enrolled in a separate class will have more interest in Public Service, and will be more highly motivated than would the students in an infusion model. However, a separate Public Service class may help to perpetuate the gap between the vocational education and the academic departments. These factors need to be considered when choosing a curriculum model.

IMPLEMENTATION OF THE PREPARATION PHASE

The guides in the *Preparing for Public Service Occupations* Phase have been developed to equip 11th grade, 12th grade, and adult education students with basic Public Service job skills. The guides have been separated into two major phase of instruction.

The first phase is the *Common Core*, which equips *every* student who is preparing for a Public Service job with basic academic and fundamental skills related to the field of Public Service. The guide provides each student with knowledge and skills in such areas as Oral Communications, Written Communication, Good Grooming, Relationships with Other People, Applying for Public Service Jobs, Techniques of Decision Making, and other pertinent information common to all the areas of public service.

The second Phase includes the *Specialty Cores*, which encompass three major occupational groups within the Public Service career family:

- *Social Services,*
- *Educational Services,*
- *Law Enforcement Services.*

After completion of the Common Core materials, students will be able to select the specialty area of greatest interest for further study. The units of the Specialty Cores deal with specific requirements for entry-level jobs in Public Service.

Educational Services, Social Services, and Law Enforcement Services were chosen as the Specialty Cores because they contain the majority of entry-level Public Service positions. The Common Core and the Specialty Cores both provide the student with different experiences, opportunities, and skills. The various core subjects may be taught in as little time as one semester or continued advantageously for as long as a year, or for even two years.

An important part of the Public Service program at the senior high school level is work experience. At this point in their training most students are ready to apply the skills they have learned. This might consist of exploratory work experience, wherein students obtain a sampling of many Public Service occupations; or vocational-work experience, in which students are paid for their work on specific Public Service jobs (cooperative education). This is where community support will make the Work-Experience Component of Public Service easy. Public Service is a program conducted within a community. Therefore, the community is perhaps the most important ingredient in a Public Service program.

The curriculum system for the Preparation Phase of the Public Service curriculum is extremely flexible. The Common Core and Specialty Cores can be implemented in a variety of ways.

The Common Core was designed to be used together with, or just prior to, the Specialty Cores. However, the Common Core material is basic to successful employment in nearly any occupation, and is closely related to many of the high school subjects. Parts of the Common Core could easily and efficiently be incorporated into speech, English, psychology, or sociology classes, or even used in conjunction with the *Orientation Guide*. The Common Core could be utilized as a separate course, or as part of a separate course in Public Service, after which the students would select their specialty area for further in-depth study.

The Specialty Core materials will most likely be utilized as separate subjects, or as the basis for small group instruction, or even individual contracts with students who wish to prepare themselves for employment in that particular area. Another possible curriculum approach is the packaging of these specialty units into mini-courses which the students would select by interest area. Students would take a course in Educational Service, Social Service, or Law Enforcement Service. These mini-courses could be utilized as related instruction for Work-Experience students, as a part of the social studies curriculum, or as a part of the curriculum in an alternative school. Adult high schools could easily adapt this type of curriculum to meet the needs of adult students. Mini-courses may represent the most feasible method, from the standpoint of time, to introduce a Public Service Occupations Curriculum to those academically-oriented students who are preparing for the more rigid entrance requirements of the four-year colleges. Mini-courses would fit well into a modular or flexible schedule.

IMPLEMENTING THE CURRICULUM SYSTEM

The following questions are suggested for consideration by a local educational Agency when its administrators are trying to decide whether or not to implement this curriculum:

- What are the goals and objectives of the Agency in implementing this curriculum? Is it for the purpose of providing students with guidance, or preparing the students for a job, or both?

- What Public Service occupations are there in the community for which this Agency should be preparing students?

- Which method of curriculum implementation would best achieve the stated goals and objectives?

- What would the staff's reactions be to each of the possible methods of implementation?

- Which method of implementation would be the easiest to interpret and sell to the public and the students?

- Which method of implementation would be the easiest to incorporate into the school's master program?

- How would the program be staffed? How much in-service training would be needed?

- Should the Public Service program last for one or two semesters, or even two or three years?

- How much credit should be given to a student for satisfying the requirements of the class?

- Which units in the Public Service Occupations curriculum need special emphasis, since they have special relevance to the community?

RELATIONSHIP TO EXISTING SYSTEM

If the Public Service Occupations Curriculum system is to be efficiently and effectively implemented, the District or local Agency must ascertain its relationship to the content of the curriculum already being utilized. Needless duplication of material is tiring to students and a waste of the District's resources. However, duplication of content is not always to be avoided. If only a few of the potential Public Service Occupations students would have had an opportunity to have been enrolled in another class offering the same or similar content, the duplication of content is necessary and proper. Content especially relevant to successful employment should be included a second, and perhaps even a third time. *Repeated reinforcement is a sound psychological learning principle.*

OPERATIONAL PROBLEMS

There are a number of operational problems to be confronted when implementing a curriculum system of any sort. Many of the problems will center around a lack of funds, understaffing, day-to-day crises, and resistance to change. However, careful planning may prevent, or at least minimize, the impact of the problems when they do develop.

Timing of Curriculum Change

The timing of the curriculum change is of great importance. If the entire Public Service Occupations Curriculum system is to be introduced at the same time, it would mean that none of the students receiving the Orientation or Preparation Phase materials will have the background information from the *Exploration Guide*. However, in succeeding years, as the sequential nature of the curriculum is utilized, students would have this background, and the teachers could adjust the Curriculum accordingly.

Another aspect of the timing has to do with time of introduction or announcement of the Curriculum . If the Program is to be initiated in September as a separate course, it needs to be added to the school's master program in about February or March of the previous school year, or no students will be programed into the class until August. Students who are interested in the class may find it difficult to get their programs changed in August. The students who are programed in August have a tendency to be the students with greatest mobility, the greatest dissatisfaction with the school program, and perhaps even the greatest number of problems. It is important to have the Program advertised prior to the regular scheduling period. Student recruiting should occur prior to Program scheduling whenever possible. This is especially true when the Public Service Program is first initiated.

Planning the Program that far in advance also gives the administrator or teacher an opportunity to order the necessary supplies, books, and equipment, and to have them available for the students to use when school begins in September.

Class Scheduling

Another operational consideration centers around the actual scheduling of the Curriculum into the school master schedule. Should the program be scheduled for one hour a day, or for two hours a day? Field trips and the release of students from class to observe activities in public offices or agencies are both much easier if the class meets for two hours a day. But, if the class meets for two hours, should it continue for one, or for two semesters? The suggestion might be made that it would be advantageous to try the class initially for a two-hour block five days a week, as a one-semester course. If experience demonstrates to the teacher that community resources are sufficient and classroom materials are adequate, than it could later be expanded into a full year's course.

The time of the school day when the class is fitted into the school schedule is also important. If the class meets during the first period in the morning, or the last period in the afternoon, it is possible to take additional time for field trips without infringing upon other teachers' class time. However, if the class meets during the last period in the day, students who have jobs may not be able to work it into their schedule. Working students may be excused under a general Work-Experience Program and, consequently, may not be able to enroll in the class even though they are planning to enter a Public Service occupation. While these points may seem trite, they are important, and may well be the factors that determine whether or not a new program is successful.

Community Involvement

One of the more important curricular aspects to be considered in career education classes such as the Public Service Program is community involvement. Its activities project out of the classroom into the community. The community's resource people, places, and agencies influence both the curriculum content and the method of instruction. The specific resources of each community will vary, each rich in its own unique way.

The operational plans of the District must provide the time and money for a school official to do the "leg work" necessary to make and maintain contacts throughout the school year. The Work-Experience Component normally requires additional personnel to monitor students outside the classroom. If the classroom teacher is provided with an additional period of preparation, this should afford sufficient time to make community contacts concerning field trips, guest speakers, etc. However, when a Work-Study or Work-Experience Program is developed, the teacher should not normally be expected to assume the added responsibility. (See the Work-Experience section of this Guide for further discussion.)

Budgets

The budget is another important curricular concern which requires careful planning. Funds need to be available to provide released time for teachers for in-service training and for curriculum development and review; to purchase curriculum materials; and to provide transportation for field trips. Even though the capital outlay for a Public Service class is small relative to many vocational programs, it will not be successful if an adequate budget is not provided.

VARIABILITY OF IMPLEMENTATION

The implementation of this curriculum may well vary greatly in effectiveness in different localities. Different schools will have different purposes, different students, and different Public Service employers in the community. No course of study, however perfectly it may function in one school, should ever be adopted in another school without critical review. The question must be asked, "Does Public Service really meet the needs of the students and the community better than any other curriculum?"

Every Public Service course should be reviewed annually to find areas of improvement for succeeding classes. This annual review could well include considerations such as these:

- In what Public Service occupations have a substantial number of former students found employment?
- Which Public Service occupations hold the most student interest?
- Which Public Service occupations promise the most employment opportunities?
- Is the present curriculum system reaching the right students at the right time with the right material?

Each District will have its own unique situations. Therefore, the instructional objectives, content, activities, and resources of the *Public Service Occupations Curriculum Guides* should be interpreted and implemented to meet those needs.

It should also be pointed out that the criterion-referenced test booklets can be a curricular aid. These evaluation questions are keyed to each unit of the curriculum guides, and relate directly to the instructional objectives of the unit. The

curriculum coordinator or teacher can use the tests to help structure the course content. These suggested test or evaluation questions allow the teacher to objectively evaluate student learning gain by their use in both pre- and post-test situations. They may also be useful in prescriptive teaching.

The Public Service Occupations Curriculum system has a broader objective than filling manpower needs in Public Service Agencies and in providing students with marketable skills. It will, hopefully, be the avenue through which many students find a successful and satisfying future. It is hoped that, while this Guide does not provide any easy solutions in implementing a program, it does provide a foundation upon which a local educational agency can build a solid curriculum structure.

Chapter 4

WORK EXPERIENCE PROGRAMS

Chapter 4

WORK EXPERIENCE PROGRAMS

WORK EXPERIENCE - AN ADJUNCT TO GOOD EDUCATION

This section of the *Implementation Guide* suggests some guidelines and procedures to facilitate initiating a Work-Experience Program, or at least some related field experiences, for students enrolled in a Public Service Occupations class.

The Public Service Occupations Class, with a related Work-Experience Education Component, can be a tremendous help to students in choosing a career and preparing for it. The transition from the academic environment of the classroom to the work environment is an excellent learning experience for the student. Some form of work experience should be considered an integral part of the Public Service Curriculum . . . not a "nice-to-have" fill-in, or an extravagant luxury.

The possibility of developing an effective Work-Experience Program in itself presents a strong rationale for initiation of Public Service Occupations classes.

In order to have a successful program, the teacher will ordinarily require approval of the Board of Education and active support of the school officials, the community, and the Public Service employers.

Work-Experience Education is presently one of the fastest

growing segments of vocational education. Because of this fact, great differences are found in programs. This is as it should be, as the Work-Experience Program should be adapted to the needs of the community.

WHAT IS WORK-EXPERIENCE?

For the purposes of this guide, *work experience is defined as that part of the curriculum designed to provide students with an opportunity to learn occupational skills through field experiences.* Students should also learn what the requirements are for successful Public Service employment. These experiences should be provided in conjunction with the *Public Service Occupations Curriculum Guides.*

These Guides provide the teacher with outlines of material which may be included in this type of class. However, to be of maximum value, the curriculum must be validated in conjunction with the local Public Service employers. This validation may be accomplished through the concurrent use of Advisory Committees, Agency visitations, and Work-Experience Components.

WHY WORK-EXPERIENCE?

The information that the teacher is continually gaining from the placement of students is invaluable in planning future classroom activities and in necessary modification of the curriculum to meet local needs. These contacts will give the teacher essential knowledge about occupational skills, duties, employment opportunities, educational requirements, and general work environment in the various agencies, departments, or organizations.

Field experiences stimulate student interest, demonstrate the relevance of the classroom instruction and are excellent

supplements to the classroom materials. Many high-school students find it difficult to relate academic material to their own personal lives. A work assignment in a Public Service Agency or Department should provide numerous opportunities to apply the academic material to which the student has been exposed. For example, a work assignment in a city park may demonstrate the importance of knowing a variety of academic information. Students may learn the identity of such poisonous plants as oleanders, basic first-aid procedures, and basic human-relations skills in settling disputes over the use of ball fields, playgrounds, or picnic areas. These types of experiences may be duplicated in nearly all of the Public Service occupational areas. *Thus, the Work-Experience Component provides the student with the practical laboratory to test and apply the classroom instruction.* The student is then motivated to learn more of the "theory" back in the classroom after the work experience.

Another practical and important aspect of Work Experience is that students may well have excellent opportunities to make contacts in their chosen occupations. These contacts and experiences may prove to be the references that open doors to future employment or special training. Even if college is planned, the work experience will provide the observant and receptive student with a background which may possibly make his classes more meaningful.

The daily routine of a Public Service job is often different from what the student expected. Students frequently have ideas about jobs being far more glamorous and exciting than they really are. The field experience enables the student to make a more realistic career choice.

In brief, these points demonstrate the value of developing a Work-Experience Component in conjunction with Public Service Occupations classes:

- It will assist the Public Service Occupations teacher in relating the curriculum content to the needs of the local Public Service employers;

- It will demonstrate to the students the relevance of the academic material to the world of work. Classroom theory will be more meaningful to students who have had some form of related work experience;

- It will provide the student with meaningful educational experiences that are impossible to simulate in the classroom;

- It provides an avenue of communication between the school and the Public Service employers regarding the job market and the effectiveness of training in the Public Service Occupations Class;

- It may provide the student with personal contacts in his field of interest that may prove beneficial in later life;

- It allows the student to test his tentative career choice.

GOALS AND OBJECTIVES OF THE PROGRAM

After developing a rationale for the program, the next step is to survey the possible Public Service work stations, and to develop specific goals for the Work-Experience Component. The goals, depending upon the students, may be:

- for the students to be provided with an opportunity to explore a variety of occupational fields within Public Service;

- for the students to acquire skills through on-the-job training in connection with the Public Service Occupations Program.

TYPES OF WORK-EXPERIENCE PROGRAMS

The goals of the Work-Experience Program will determine the types of work experience. The literature identifies three major types of work experience:

- Exploratory work experience,
- General work experience,
- Vocational work experience.

Exploratory work experience is a program that provides the student with an opportunity to sample and observe a variety of work situations. The objective is to help students ascertain their suitability for the occupations they are exploring.

General work experience is supervised part-time employment as a part of the total school program, not related to any particular class in school. The major aim of this type of experience is to assist students to become mature and experienced workers.

Vocational work experience education is an arrangement whereby students are employed in occupations which allow them to use and refine the material presented to them in school vocational classes. The work situation is related to the classroom instruction.

COOPERATIVE VOCATIONAL EDUCATION

The Cooperative Vocational Education Program, as defined by Public Law 90-576, is a form of vocational Work-Experience Education, which demands close correlation of classroom activities with on-the-job training. According to the legal definition, the criteria for vocational education are:

° The student must receive academic and vocational instruction by alternation of study in school with a job in the

occupational field;

- The two experiences must be planned and supervised by the school and employers to insure that these activities contribute to the student's education and employability;

- The work periods and school attendance may be on alternate half days, full days, weeks, or other periods of time.

Cooperative vocational education programs may be funded under either Parts B or G of Public Law 90-576. Part G has the purpose of expanding cooperative education to disadvantaged students, under the title of "Work-Study." This program has enabled many students to obtain work experience in Public Agencies. Qualification of a student for this program requires a showing that he is disadvantaged, following which the "Work-Study Coordinator" may place the qualifying student in a non-profit agency or a cooperating governmental agency.

Work-Study is a workable arrangement for a Public Service Occupations Program with a considerable number of enrolled disadvantaged students. However, a successful Work-Study Program does require considerable planning and a high level of community cooperation. Finding, securing, and keeping an adequate number of desirable work stations available requires that a number of Public Service employers throughout the community have working knowledge of the Program. When students are released from the school for participation in Work Study, parents and faculty must have a sympathetic understanding of the objectives and dynamics of the Program. The funding of Work-Study Programs is often misunderstood, and the Coordinator must be willing to take time to explain to each cooperating employer the source of the Work-Study funds.

The Public Service Occupations teacher would also cooperate closely with another program, the Neighborhood Youth Corps.

(The NYC is a federally funded program providing work experience for low-income students.)

ALTERNATIVE FORMS OF WORK-EXPERIENCE PROGRAMS

It is quite possible that a Public Service Occupations Program could be utilizing, simultaneously, all of the above types of work experience. If both paid and non-paid Work-Experience Programs are utilized at the same time, the instructor of the class and the Work-Experience Coordinator must be sure that each of the students involved understands his own particular situation before he starts in the Program. Some of the literature suggests the desirability of not mixing programs which have paid and non-paid work experience in operation at the same time. However, if the facts concerning pay or no-pay are known in advance, future problems can be averted.

If a student wishes to have some field experience, and there is no feasible way of implementing a paid experience for him, the student should be allowed to choose a non-paid experience. The needs and interests of the students and the availability of work stations should be the guiding factors governing students' placement into various types of work situations. All Agencies have different operational procedures and policies. It should therefore be expected that the difficulty of getting students on work stations will be different in each Agency or Department.

PLANNING THE WORK-EXPERIENCE PROGRAM

PROGRAM SELECTION TO MEET STUDENT'S NEEDS

In planning a Work-Experience Program to accompany a Public Service Occupations Class, the planners need to analyze the prospective students carefully. Exploratory programs are usually offered to high school freshman and sophomores. General work experience and vocational work experience are usually offered only to juniors and seniors in the high school. An *Exploration of Public Services* program can be offered at the

junior high school level, and it is suggested that an accompanying Exploratory Work-Experience Program be developed and utilized with it. A Vocational Work-Experience Program should accompany the curriculum if it is initiated at the senior high school level. However, if there are juniors and seniors who want to explore a number of different Public Service job families, without prior classes in Public Service (as in junior high school), field trips or even a modified Exploratory Work-Experience Program may prove very beneficial. Coordination of such programs can be quite time consuming. Contracts with the Public Service Agencies should be written. Insurance coverage, as legally required, must be obtained.

The Preparation Phase of the Public Service Occupations Class should normally be accompanied by a Vocational Work-Experience Component. Most students enrolled in a Public Service Preparation Class will be mature enough to assume the responsibilities of holding a part-time job, and of representing the school in the community. However, the student's maturity, motivation, and trustworthiness need to be assessed carefully before a school official makes a recommendation of placement. The best policy is for the teacher to suggest to the students methods of conducting themselves during job interviews, what to bring along for interviews, and how to prepare a resumé. The teacher should give the students names, addresses, and phone numbers of the Public Service employers to be contacted for the job interviews. If more than one student is interested in a particular job, give the employer the opportunity to interview each one. He can then select the one that appears to best meet the Agency's needs. This also places part of the responsibility on the employer if the student does not work out to the employer's expectations.

When planning the Public Service Occupations class, a survey should be made of entry-level occupations in Public Service in the local area, and potential Public Service employers

should be located. An analysis should be made of possible jobs to identify the duties that could be performed by students.

CONTACT WITH EMPLOYERS

Pre-Planning with Employers

The Agencies should be visited to determine their willingness to cooperate with the school in a Work-Experience Program, to host field trips, or utilize Work-Study student employees if such a program were funded. The Coordinator also needs to determine, at time of contact, the facilities that are available for training of student employees.

Would the duties being planned for the student actually fit into the work environment?

The cooperating agency will have students do what they want to have them do, but sometimes they overlook talents that young people have. For example, a student may have outstanding skills in cartooning and lettering, and could be of great value to certain departments in making signs, overlays for transparencies, educational aids, etc. Unless the Coordinator points this out to the Agency, or urges the student to bring samples along to the interview, these talents and skills are not likely to be utilized.

Establishing Proper Lines of Communication

An Agency Manager or Department Head is usually the representative of the employer who approves the initiation of a Public Service Work-Experience Education Program, but the actual supervisor of the student worker is usually one or two levels below this level. This can be a source of difficulty. The person actually assigned to supervise the student should also have

direct communication with the Work-Experience Coordinator, and have a voice in whether or not a student is accepted in his Department or Section.

The Work-Experience Coordinator should discuss the program and the student with the supervisor who will be in daily contact with the student prior to the student's placement on the job. If this step is omitted, the supervisor may resent the fact that a prior consultation was not made. The end result may make the field experience a miserable experience for the student.

Additionally, if the Coordinator has a direct line of communication with the actual supervisor, problems can be handled when they arise, rather than after they have been drawn out or turned into a crisis.

FACTORS FOR CONSIDERATION DURING PLANNING OPERATIONS

Handling of Agency Materials

Many Public Service Agencies have volumes of confidential materials. School records, police records, court records, welfare files, tax records, etc., are all confidential and rather sensitive. Such information must be handled with great care. The Work-Experience educator needs to prepare both the student and the Public Service employer for handling problems in this area.

Unless it is pointed out at the start, students assigned to work in a school office, for example, may not realize that other student's telephone numbers or test scores are confidential. They should be disseminated only with the greatest discretion (and not at all by the student) to remain within established legal boundaries.

The employing Agency and the School Coordinator should have

prior understanding as to what types of confidential material should be exposed to the student. It is not only a matter of having trust in the students, but a question of how much responsibility should be placed upon part-time student workers, who are just getting an introduction to the world of work.

Safety

Another factor of concern to the school is the student's safety:

- Should Work-Experience students be permitted to ride along in police patrol cars?

- What would happen should the student be involved in a shoot-out or a high-speed chase and car wreck?

- A student worker at a city animal shelter could conceivably be bitten by an animal inflicted with rabies.

It is possible to find potentially dangerous situations in nearly all of the work stations. These possibilities need to be discussed with the student and the cooperating governmental Agency so that, in case of an emergency, there is a plan of action.

The school official, prior to visiting the Agency, should determine the duties likely to be expected of a student worker and possible problem areas and hazards. The cooperating Public Service employer has the responsibility of deciding what student workers may and may not do.

When contact is made, the Coordinator needs to emphasize that the students should have a variety of experiences to maintain interest and to provide them with sound educational programs.

IMPLEMENTING THE PROGRAM

COORDINATION WITH EMPLOYERS AND ADMINISTRATORS

As soon as the Program is established, a procedure should be developed to keep both the school site Administrator and the teacher informed of the program and of the actual placement of students. If a student encounters a problem, it is possible that the Public Service teacher or site Administrator would be the school official contacted if the Work-Experience Coordinator should not be readily available. It is embarrassing for a school official to be caught in a position of not knowing that a student has even been placed in a particular Agency. The Work-Experience Coordinator (or equivalent person) should provide a current list of names, placements, cooperating Agencies, and supervisors for the site administrator. It makes for much smoother staff relations and good public relations.

The attitude of the school officials and teachers will be affected by how well organized the Public Service Work-Experience Component is, and how well it is explained to them. It is necessary to outline the goals of the program and the experiences to which the students will be exposed.

It is sometimes difficult to keep abreast of all the facets of an operating Work-Experience Program. It is essential that the number of students assigned to one Coordinator be limited to afford sufficient time to perform the variety of duties. If the Coordinator is not able to keep up with developments, problems will arise and the work stations may withdraw from the Program, instead of expanding and being of service to the students of the community.

LEGAL REQUIREMENTS

A major responsibility of the Work-Experience educator is to keep abreast of the legal requirements for a Work-Experienced Program, since there are numerous legal implications when

originating a new program. Furthermore, student employers must comply with the Federal Fair Labor Standards and the state codes, in addition to the District regulations.

There are other legalities to be considered when developing a new Program:

- What hours may students work?
  - Students may not work before _____AM or after _____PM.
  - Students under 18 years of age may not work more than a specified number of hours a day or a week depending upon various circumstances.
- What is minimum wage at which student employees may work?
- Where and when is a work permit required?
- What are the required mechanics of a Work-Experience Program?
  - Does the state require that a plan be submitted?
  - What employment is forbidden by law? Are students under 18 years of age not allowed to work in certain hazardous occupations?
  - Have provisions been made for complying with the state requirements for record keeping?

Detailed discussions of these points would be rather fruitless since they change often and are not uniform in the various states.

Records must be maintained to include such items as these:

- The type of Work-Experience education in which the student is enrolled, where the student was employed, and the type of job held;

- A record of the work permit issued, if applicable;

- Employers' reports of students' attendance and performance on the job;

- Reports by District personnel of observations of pupils at each work station;

- Reports by District personnel of consultations with employees or employers;

- Ratings of each pupil, including the grade, by District personnel.

The planning requirements will involve preparation of various forms to gather much of this information for presentation in a uniform manner, and subsequent uniform analysis. Suggested typical forms are presented in accompanying figures to accomplish this:

Figure 12, Typical Public Service Student Work-Experience Application;

Figure 13, Typical Public Service Work-Experience Placement Agreement;

Figure 14, Typical Public Service Work-Experience Evaluation.

Copies of these forms will need to be retained for each student.

BUDGETARY FACTORS

Budgetary considerations are always a deciding factor when implementing a new program. The number of students enrolled is a

School _____

Name _____ Date _____ Grade _____

Date of birth _____

Social Security No. _____ Driver's License No. _____

What do you plan to do after graduation? _____

_____

Do you have transportation? ____ If yes, explain: _____

_____

What is your past employment?

Employer	Duties You Performed	Length of Employment	Reason for Leaving

What occupational courses have you completed in high school?

_____ _____

_____ _____

_____ _____

Can you type? _____ If yes, how many words per minute? _____

What is your present class schedule?

_____ _____

_____ _____

_____ _____

In which governmental Agency or Department would you like to work? _____

_____

What special talents or skills do you possess (cartooning, etc.)? _____

_____

_____

_____
Student's Signature

_____
Date

Figure 12

Typical Public Service Student Work-Experience Application

To provide a basis of understanding, and to promote a sound educational experience, this agreement is established on _____.
Date

The student, _____ will begin a work-experience assignment at _____ on or about _____, 197__, which will end on or about _____, 197__, unless this arrangement becomes unsatisfactory to any of the undersigned, and is then terminated by giving notice to the other parties signing:

The person responsible for supervising the student on the job is: _____
Name

_____ _____
Title Organization

IT IS UNDERSTOOD THAT THE EMPLOYER WILL:

Observe the federal, state, and local regulations relating to the umeployment of minors;
Provide the student with opportunities to develop job skills;
Instruct the student in desirable ways of doing his work;
Assist the teacher in appraising the student's performance.

THE STUDENT AGREES TO:

Be dependable, punctual, loyal, and courteous;
Be responsible for obtaining his or her own transportation to and from the work station;
Follow instructions and follow the usual channels of communication;
Notify the employer and the school in advance in case of necessary absences;
Avoid unsafe situations;
Keep confidential information confidential.

THE TEACHER, ON BEHALF OF THE SCHOOL, AGREES TO:

Visit the student on the job;
Be of assistance to both the employer and the student;
Be readily available for consultation;
Be responsible for the final determination of the student's grade.

THE PARENTS AGREE THAT:

The student may accept this assignment.
The student will have transportation for this assignment.

SIGNATURES:

Student: _____ Phone _____
Address: _____ Date: _____

Parents: _____ Phone _____
Address: _____ Date: _____

Work Supervisor: _____ Phone _____
Address: _____ Date: _____

Teacher: _____ Phone _____
Address: _____ Date: _____

School: _____ Phone _____
Address: _____ Date: _____

Figure 13

Typical Public Service Work-Experience Placement Agreement

School: _____

Student: _____

Public Service Employer: _____

Please check the areas which you feel best describe the student's work experience progress. Your response will be a part of the student's final grade.

JOB PERFORMANCE	EXCELLENT	VERY GOOD	GOOD	ACCEPTABLE	POOR
Punctuality					
Attendance					
Ability to follow instructions					
Judgment					
Human relations					
ATTITUDES					
Interest in work					
Ability to accept criticism					
PERSONAL					
Appropriate dress					
Cleanliness					
Neatness					

COMMENTS: _____

_____

_____
Supervisor's Signature

_____
Date

Figure 14

Typical Public Service Work-Experience Evaluation

large factor here. Too few or too many students will unquestionably ruin the program. These budget items should not be overlooked:

- Office space is essential to maintain the necessary records. If the Coordinator has classroom duties, a classroom is acceptable, provided it has a telephone. File cabinets, folders, and forms are other easily overlooked items that must be included in the budget;

- Travel money must be provided for the Coordinator. A mileage allowance is perhaps the most satisfactory way of handling this.

It is important to remember that Public Service employers operate on the fiscal year. Their budgets are pretty well locked in, and it is extremely difficult for them to consider hiring student help if this was not provided for when the budgets were adopted prior to July 1 of the current fiscal year. Long-range planning is a must for developing part-time positions in Public Service agencies. However, disadvantaged students may be placed through "Work-Study" funds if the District has an approved program. Work-Study may be the initial door opener, after which the Department or Agency may wish to budget a part-time position of its own.

If there is no possibility of obtaining a paid position for the student, field trips or volunteer positions may offer related field experiences. An internship or an Exploratory Work-Experience Program could offer the student a sound educational experience.

THE STUDENT IN THE PROGRAM

SELECTING AND PREPARING THE STUDENT

The Coordinator must screen and prepare students very carefully before placing them at a work station, and try to foresee problems

that may be encountered. Most programs are likely to run into problems in certain areas.

The student must be aware of what kinds of behavior will be expected at the work site. If the student will be handling confidential information, the Coordinator must be sure that the student is aware of and accepts such responsibility. The Coordinator needs to spend time individually with the student discussing possible material of this nature that might be seen or used at the assigned work station.

Students need to be alerted to the fact that they may be considered a nuisance if they do not show cooperation and willingness to work.

Transportation to and from the work site is an area that also needs to be considered. Is public transportation available or does the student have an automobile? Student automobiles do not have a high reliability rating, and a backup means of transportation very probably needs to be discussed. Lack of transportation is likely to cause student tardiness or absence from work a few times during the course of a program, thus creating bad student-employer relationships.

Certainly an important factor that should be discussed is whether or not the student is willing to dress appropriately for the job.

Another common problem is that students are initially thrilled with the idea of getting a Public Service job. However, they do not anticipate what it will really be like to miss that athletic event or that club outing to which all of their friends are going while they have to go to work. Consequently, a few students will occasionally skip work to take part in another school activity.

These topics should definitely be discussed with the student during the screening process.

The Coordinator must also screen the possible Public Service work stations in making student selection. Work sites should not be accepted automatically. An analysis must be made of what a student worker or volunteer could do on the location. In addition, the Coordinator should consider (in-so-far as possible) possible interrelationships of the people involved. The Coordinator may need to match student and employer personalities, as well as matching student career choices with job stations. It is difficult enough for a student to fit into the daily routine of a job without having a personality clash because of hair length, youthful appearance, bad attitudes, or other disturbing factors.

The employing agency should be alerted to these problem areas. Sometimes cooperating agencies make unrealistic demands upon the student. The student should be instructed as to what to do if this should occur.

SCHOOL CREDIT FOR WORK-EXPERIENCE

The amount of credit that a student may earn in work-experience education which will count toward graduation may be limited by state codes. The local district may further limit allowable work-experience credit.

It is suggested that if a student is working ten hours a week or more, five units of credit per semester should be given, since this is comparable to other laboratory classes. Variable credit, depending upon the number of hours that a student works, is another option that may be considered. It is possible that certain Agencies desire, or are willing to have students for less than ten hours a week. It would be to the advantage of the student to get the experience that an Agency could provide,

and also be able to receive educational credit.

An additional option that may provide related field experiences would be to release the student from the classroom for a specified period of time to observe at a work station. This would not be classified as work experience as such, and would not show on the student's record. This observation could be in the nature of an internship or extended field trip of the Public-Service Occupations Class. The grades earned from the observation time would be incorporated into the grade earned by the student in the Public Service Occupations Class. One of the advantages of this plan is that the student remains much more closely under the teacher's control. It does not infringe upon after-school activities of the student, such as athletic and club participation. Furthermore, such positions do not involve money and are, consequently, easier to find. However, the teacher must again obtain written agreements and waivers from parents and the participating Agencies. In this, as in all other Work-Experience participation, the teacher needs to determine whether the student has adequate insurance coverage while at the work station, and while going to and from this station.

SUPERVISION AND EVALUATION OF STUDENTS

Supervision is extremely important, as it enables the Coordinator to observe the student on the job and to evaluate the activities to which he is assigned. The Coordinator will be responsible for grading the student. The employing Agency may give the student a grade, but Agencies will vary tremendously in their grading systems. The Coordinator will, for the sake of fairness, have to take into consideration the grading practices of the various Public Service Agencies, and adjust the employer's evaluations in light of his own observations of the student on the work station.

Many Work-Experience Education Guides call for the Coordinator

to visit the place of employment twice each semester. Once a month would be a more effective Public Service visitation. Such a policy can help avert problems which might get out of hand. If a student is not performing satisfactorily, the Supervisor may ask the department head or manager to call the Work-Experience Coordinator. The Public Service manager may or may not remember to do so, or may wait several days before contacting the Coordinator. Even if the manager does so immediately, the problem still may not be accurately described. To correct problems or alleviate disturbing events, the Coordinator needs to get directly in touch with the supervisor and the student. Thus, if there is a line of communication developed by regular visits and the student knows it, there is much less likelihood of a problem developing.

Chapter 5

COMMUNITY INVOLVEMENT AND RESOURCES

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NEED FOR COMMUNITY INVOLVEMENT

In order to accomplish the specific program goals of Public Service Occupations classes, it is essential that all available information, knowledge, and "know-how" be utilized at all grade levels. A primary way for students to obtain accurate information about such items as occupational opportunities, career ladders, training requirements, entry level job skills, "saleable skills," and "life styles," is from the community. It is impossible to divorce the content of a Public Service Occupations curriculum from the needs, knowledge, and resources that exist outside the schools.

The benefits of using all kinds of community resources in schools are numerous. Community resources help provide both students and teachers with a more realistic picture of actual life and work situations, needs, and problems. The use of concrete, firsthand illustrations and demonstrations clarifies and makes more relevant the teaching-learning process. Utilizing community resources exposes and clarifies the interdependent relationships that exist in a community. In short, community resources can be used to merge career education concepts with real-world needs and understanding.

RESOURCES FOR COMMUNITY INVOLVEMENT

COMMUNITY RESOURCES

What are Community Resources?

In the context of the Public Service Occupations Curriculum Program, *community resources* can be defined as those locally available people, materials, and services which are useful and valuable for educational purposes:

People - Any individuals outside the schools who can provide special expertise to augment any learning situation. As such individuals relate specifically to Public Service Occupations concerns, they might provide information about occupations, career training, life styles, skills, and career ladders. They might also clarify requirements for obtaining jobs, and make clear the relationship between learning activities in school, and requirements for successful job applications at a later time.

When considering human resources from the community at large, it is important also to not forget the wealth of talent, expertise, and valuable experience from individuals within the school community: the student body, the teaching staff, and parents. An impressive listing of hobbies, avocational interests, other job experience, life styles, and leisure time activities can be accumulated for use by students. Finding and making use of these resources should never be eliminated from the general search for ways to enrich the curriculum and the students' experience and knowledge.

Materials - Items available from commercial manufacturers of educational products; also, many free and inexpensive films, audio-visual materials, displays, demonstration kits, and other products produced by business, industry, and local organizations with emphasis on particular services, products, or areas of related interest. Many of these materials deal with jobs,

training, attitudes, and job-interview skills, as well as such subject areas as economics, history, consumer education, ecology, and science.

Services - Such diverse activities as participation in teacher and counselor inservice workshops; paid and exploratory work experience for students; service on educational advisory committees; and making available in-house training opportunities to students, teachers, and administrators.

How are Community Resources Identified?

A variety of attempts have been made by local groups such as "Industry-Education Councils," to gather information about community resources that are available in support of educational programs. Examples of such efforts include:

- Community Resource Directories - Listings of local resources (people, materials, and services) from various local businesses, industries, organizations, and community groups available to the schools. Each individual listing would indicate a contact person in the business, industry, or organization, together with telephone numbers or addresses. In addition, other specific notes might be included as to frequency of availability and numbers of students or teachers to be accommodated.

- Ad-Hoc Community Resource Committees - Committees of influential and knowledgeable representatives from Public Service occupations. These committees provide resource personnel, materials, and information to school personnel as requested.

- Career Conferences - Periodic local conferences sponsored for students in a given school district or region, developed around a Public Service Occupations theme, and including representatives from local, state, and federal government.

These representatives, covering broad ranges of jobs, occupational, and life-style concerns within government, are available to talk with students about such matters as training, union requirements, entry-level skills, salary, working conditions, career ladders, and the way people within those job areas live their lives.

- In-Service Training Programs for Teachers, Counselors, and Administrators - Workshops and seminars developed to present better understandings of career education concepts, focusing on local community resource development and utilization. Such workshops provide personal contacts for the school participants, and offer them opportunities to become familiar with the kinds of materials, programs, people, and services each organization can make available to the schools. The workshops have been organized in several ways:

  - School or district-sponsored in-service training courses. Teachers and counselors are provided release time to participate in the training activity; or, if after school hours, they receive incremental district credit;

  - Weekend workshops sponsored cooperatively by local Industry-Education Councils, and public or private colleges in the area. College credit can be received by participating teachers and counselors;

  - Extended summer school courses for credit through local public or private colleges;

  - Community sponsored in-service activities for teachers and counselors.

- Exploratory Programs Developed Around Specific Occupational Areas - Educational program packages are developed in

cooperation with Agency personnel to provide participating students with in-depth instructional course work in specific occupational areas, such as management, airlines, health, and ecology. Agency personnel share a portion of the teaching activity and course preparation, while classroom instruction is augmented by a variety of observation and exploratory experiences at the Agency. A very limited number of these programs have been organized on an intra- and inter-district basis, to permit better utilization of resources and provide more student participation.

- Work-Experience Education Programs - Because of their diversity, no attempt is made to describe the general, exploratory, and vocational Work-Experience Education Programs that are presently operating in many high schools under well-defined state guidelines. These programs should certainly be included in all coordinated community resource efforts with a given school or district. Personnel from such programs are particularly well qualified to assist in further identifying and assessing the resources of the business community.

WHAT PROBLEMS ARE ASSOCIATED WITH COMMUNITY RESOURCE USAGE AND ACCESS?

Separation of Community and School

Probably the greatest single problem to any community resource access program is the isolation of the schools from their communities. This isolation creates a hesitancy on the part of both schools and adjacent communities to approach one another. Symptomatic of this isolation is the fact that most school personnel have had limited experience outside education. It is significant that even their formal training rarely, if ever, provides them information or experience in the world of work outside academia. Consequently, many school personnel are ill-

equipped for society-based learning programs. They lack the skills, knowledge, and confidence to properly approach their communities for resources that will support and augment school programs and student activities. Instead of seeing the community as an extension to their own knowledge and expertise, such personnel may feel threatened rather than encouraged by the existence of these possibilities.

On the other hand, the community, in its isolation from the educational establishment, is often fearful of involvement in educational programs. These fears are reflected in misconceptions about school youth; misgivings about their own abilities to share meaningful and useful information, experience, and knowledge; anxiety about becoming overwhelmed and innundated with requests for help once it is offered; and some reluctance, principally resulting from misunderstanding and ignorance, to experiment with new forms of community-school instructional models.

Lack of Coordination within Schools

Even when the community is eager to participate in school programs, lack of coordination within the school system of the various programs that utilize the community sometimes makes access to the "right" contact in the school difficult, if not impossible.

Anticipating ever-increasing numbers of demands on the community for support and augmentation of expanding career education programs, the need for coordination among these programs becomes quite apparent. Innundating a community with increasing numbers of requests to support similar programs in many schools, districts, and other communities is a quick way to "close the door" to resource access. Educators must begin to develop methods and processes to coordinate like programs -- particularly since these programs affect businesses and organizations where several schools,

districts, or communities would be close enough to share the same resources.

Developing Lines of Communication

Ways must be developed to begin to share the information available about the resources of a given community with all levels of school personnel. All school personnel must be provided with this knowledge about the world of work and their respective communities, before their students can expect to receive appropriate reinforcement through related instructional and counseling activities. Unless programs are developed and such development communicated to others through in-service workshops or seminars, utilization of identified resources will be limited and sporadic. A point worth emphasizing: most teachers or counselors have neither the knowledge nor the tools with which to effectively integrate Public Service career education concepts and practices into ongoing teaching and counseling programs and activities without community and administrative cooperation.

If teachers and counselors are not aware of the availability of community resources, or if they don't know how to use them effectively to augment the Public Service program, the resources will not be used. It is as bad to over-utilize a community resource as it is to under-utilize a developed and ready resource, or to not use it at all. To solicit and encourage participation on the part of an individual or business in the community implies usage. A way to quickly "turn off" a ready resource is not to use it, or to misuse it.

Most school districts will initially protest that there are not enough dollars to support staff or ongoing programs, much less adding a new program in Public Service education, or providing the opportunity for the staff to coordinate community resources which may seem far divorced from the teaching process.

PLANNING FOR COMMUNITY INVOLVEMENT

WHERE TO BEGIN

Several general areas should be considered, subjected to careful planning, and examined as appropriate foundations for any practical integration of community involvement in Public Service Occupations Programs. As a beginning step, schools need to look at questions of feasibility -- defining programs and their needs, assessing concurrent staff training problems, and identifying essential elements of the Program coordination.

In the increasingly complex and difficult world of today, the inability to provide students with information about the world-of-work and the kinds of skills, attitudes, and requirements they will need to become useful and productive citizens, is to fail in one of the primary missions of the schools.

Many school districts are already operating some programs that utilize community resources: Work-Experience Education (general, exploratory, vocational), community labs, volunteer activities, speakers' bureaus, etc. Generally such programs operate autonomously and little coordination of effort or sharing of information is carried out. A first step, therefore, should be to begin to identify the programs, resources, and extent of participation and usage in progress at the time. This might be accomplished in several ways:

- through the efforts of paraprofessional personnel assigned the task;

- Send out "back-to-school" letters to parents in September inviting them into the school. Write explicit newsletter invitations;

- Invite parents and community leaders to "open houses," "career nights," etc.;

- Invite parents and other citizens to speak to the Public Service Occupations classes;

- Invite community organizations to meet in conjunction with the classes;

- Provide specific adult programs, or continuing education classes, in areas directly related to Public Service Occupations.

Going Into the Community

It is equally important that the Public Service Occupations teacher should make himself (or herself) visible to the community, and to become involved in community affairs. The teacher should appraise the community of the strengths and possibilities of the Public Service training. This can be implemented by:

- Appearing at community functions;

- Joining community organizations;

- Maintaining a "speakers list" of school personnel who are willing to speak or demonstrate the Program at meetings, and make community officials and organizations aware of this availability;

- through active support of a volunteer effort from the community;

- by providing sufficient time to a counselor or teacher to undertake the task;

- by hiring a Community Resource Coordinator to work with a specific school(s) or the district as a whole.

Identification of Programs

Individual, concise statements should be prepared for each program which utilizes resources in the community. These should include program aims, and possible benefits to students, teachers, counselors, and community participants from such programs. Descriptive statements should be aimed at persuading participation of both non-school and non-academic people.

Outline expected assistance to each program from the various cooperating community groups or resources, including:

- what the student is expected to learn;
- number of students who will particpate;
- the time, and how often, the community resource will be needed by the program;
- planned feedback from the community resource participant;
- planned evaluation.

Preliminary Steps to Involving the Community

In addition, the program director or coordinator should:

- Find out if there are other programs in the school or district that already use resources in the local community;
- Determine resources that are being tapped;
- Determine use of these resources;
- Determine frequency of resource use;

° Determine any problems with present programs.

Identification of Resources

Identify possible community participants and their responsibilities, or resources which may be used in the Public Service occupations classes, through assistance of such groups as the Advisory Committee, the Chamber of Commerce, and leaders in other local community service organizations. Consult the yellow pages of the Telephone Directory, club membership lists, want ads, community resource directories, and volunteer bureau listings.

Special attention should be given those resources for which the demand is great and access limited. Every effort should be made to consolidate program activities which directly use such resources and to establish clear lines of liaison and coordination.

Do not overlook the wealth of talent, expertise, and valuable experience of the school community: the student body, the teaching staff, and parents. Impressive listings of hobbies, avocational interests, other job experiences, life styles, and leisure time activities can be accumulated for use by students and in the classroom.

Seek the help, advice, and coordination of other school personnel who utilize the community in ongoing programs and activities, and can help in identifying resources, and eliminating duplication and resource overuse.

Need for Centralized Coordination

The need to centralize coordination of the Public Service Program within the school building and at the district level is essential for these reasons:

° To ensure that communication to the community resources

is clear and that all participants understand what their responsibilities to the program and students are;

- To ensure that resources from the community are not over-used, mis-used, or under-used;

- To avoid simultaneous requests for essentially the same service, such as the same speakers requested for several science classes at different times within one school;

- To eliminate confusion as to who is responsible for what and for whom, and to ensure that community resource people from the community know to whom they should direct questions and complaints;

- To serve as an information clearinghouse for district and school personnel as new community resources are identified and older resources eliminated;

- To publicize programs using community resources within the school and/or district to facilitate greater student involvement and teacher cooperation and exchange.

Resource Coordinator

One approach to consolidating resource access is to identify an individual to act in a liaison capacity to a specifically limited, but desirable, community resource, industry, or organization. This individual could coordinate access to the resource for several schools or districts, or the region, and thus eliminate duplication of program and school effort. This approach will require the development of greater flexibility in staffing and programming on the part of schools to attain effective and efficient utilization of the community.

The Resource Coordinator, or any teacher or other individual

expected to oversee community resource identification, development, and coordination activities, should have a basic understanding of Public Service concepts and of some program activities that might be initiated. Such a person should:

- Have the respect of school personnel at all levels;
- Utilize the capabilities and talents of school personnel in achieving these tasks;
- Have the confidence to directly approach individuals from the community-at-large either by phone or personal interview;
- Have good oral and written communication skills;
- Be persuasive and personable and be able to get along with different kinds of people and situations;
- Have a good understanding of the school organization, and a familiarity with both teaching and counseling functions;
- Have a clear understanding of business and Agency organization, operations, and functions.

IMPLEMENTING COMMUNITY INVOLVEMENT

OBTAINING COMMUNITY PARTICIPANTS

Analysis of the inventories of programs should begin to establish tentative listings of resource needs. These can then be matched against the inventory of resources for initial identification of possible potential participants in program presentation. This list can be expanded by contacts with Public Service Agencies, and other community organizations and agencies -- by getting acquainted "Downtown." Utilize such methods as these:

- Developing and maintaining a file of Agencies and contact persons;

- Contacting the local State Employment Service for assistance and information on placement services and to identify potential participants or ultimate employers;

- Developing personal contacts with Agencies, administrators, personnel managers, and civic groups;

- Attending civic clubs such as Rotary, Kiwanis, Lions, or Chambers of Commerce; offering to speak or present programs;

- Subscribing to appropriate trade and business journals;

- Contacting local agencies for the physically and mentally handicapped, or for the disadvantaged.

Make contacts to potential community participants, with ample lead time, by judicious and frequent use of telephone and personal interviews. It may be desirable to pave the way for some contacts by arranging introductions through school personnel, parents of students, other community leaders, or mutual friends. Involvement of others at all stages adds motivation and interest.

Selection of the optimum contact method for each potential participant should be determined with care to insure the most effective approach to that individual.

Initial contacts should be confirmed, or followed up, by personal letter. The timing and form of such letters are essential factors. The writing must embody careful phraseology and tactful confirmation of objectives, needs, and scheduling. A ways say, "Thank You"!

MAINTAINING PARTICIPANT INTEREST

Participant interest and motivation must be maintained on a high level.

Ongoing programs, and their contributing participants, should be monitored, in an unobtrusive and tactful manner. This should consider schedular requirements, but be done thoroughly and effectively.

Contacts should be primarily directed toward obtaining cooperation. Attention should also be given to eliciting unprejudiced evaluation of programs and participants, with suggestions for action or improvement, and meaningful feedback.

Respect any "idiosyncrasies," sensed or found, in the contact person. At the same time, don't be afraid to admit a mistake, and to remedy it promptly. Be honest with all participants. If the ideas of potential or actual participants are good, use them, and let the suggestor and others know of this use.

The community should always be kept involved, and no contact should ever be just "taken-for-granted."

Bringing the Community Into the School

An important factor in keeping interest on a high plane is to literally "bring the community into the school." Make school facilities available to citizens who want to see the school and the Program in action.

This may be approached in a variety of ways:

- Make the community feel welcome and needed when they come to the school. Many adults will be uneasy about entering a school uninvited;

- Involving students and parents of students as speakers, and as performers or demonstrators;

- Providing community service projects. Provide for adult

supervision (either from the school or from the community), but let the students organize and direct activities;

- Encouraging volunteer participation;

- Visiting in homes, offices, and on-the-job. Make appointments in advance, by telephone, or by mail. Find out where the person feels most comfortable -- at home or on-the-job.

Providing Information About the Program

The community should be kept aware of the Program, and of its value to their children, by providing the community with updated specific information on a scheduled basis.

Public information programs should be well and carefully planned and organized. A planned program of community relations will not guarantee good will. It will, however, afford a greater possibility of creating it than would unplanned programs.

This activity may be implemented through such media as:

- Preparing a school catalog, student handbook, or program brochures, with information relating to Program aims, objectives, curriculum, and needs;

- Preparing and distributing newsletters, on a regular schedule. Include telephone numbers and names of school personnel. Encourage student input;

- Use Calling Cards, with as much pertinent information as possible;

- Prepare Posters, and distribute widely, as at shopping centers and recreational facilities;

- Release news items to all local mass media. Write in newspaper style (relatively direct and short). Include a wide selection of possible photographs;

- Participate in radio and television talk shows;

- Use radio and television to desseminate career information and recruit students;

- Maintain a high degree of honesty in all activities. Be frank, and "level" with the community.

DEALING WITH PEOPLE

Community resources and their identification, coordination and usage essentially involve *PEOPLE*. When interpersonal communications in any school-community program are reduced to routine or to impersonal dealings, the program will lose its vitality, strength, and effectiveness. The long-term success of any program that goes beyond the school to the greater community will depend in large part upon the continued sensitivity and human approach that is initiated and sustained by all participants.

People are the key factors in all Programs or activities. Without the commitment and assistance of others, programs die. Nothing happens unless the teacher or administrator can talk someone into helping, or they see they have something to gain from the Program or school.

There is little new to say about how to persuade people apart from the obvious need to respect and to appreciate them. The teacher or contact person should try to understand the position of others, to see the world as they see it. Assume that they are good at what they do and interested in helping. Be open, honest, and direct with others, but learn to recognize when

tact is required. Openness and candor are the best policies for continued fruitful contact.

By all means, keep *your* commitments.

USE OF PUBLIC SERVICE ADVISORY COMMITTEE

It is essential that a Public Service Advisory Committee be formed (preferably by the instructor) to actively participate in the development and maintenance of the program. The Advisory Committee will help to assure support by the community through the active involvement of community people in the planning and implementation stage. The Public Service Advisory Committee should be reflective of the social, economic, and political characteristics of the community. Its membership should include leaders and representatives from such organizations as federal, state, and local civil-service employment agencies, community colleges, and other public service agencies. Membership on the Advisory Committee should also include representative parents and students.

Purpose of the Advisory Committee

By definition, an Advisory Committee is one enpowered to give advise, counsel, recommendations, or warning. Public Service Advisory Committees are organized for the purpose of providing administrators and educators with otherwise difficult-to-obtain information to be used in the planning, development, delivery, and evaluation of Public Service Occupations Programs.

It is important to stress that a Public Service Advisory Committee is not a substitute for administrators or teachers, nor does it have decisional authority over their programs. Its power is one of persuasion and will exist in direct proportion to the diligence with which the members perform their duties, and the willingness of district personnel to make effective use of their efforts.

The primary and overriding purpose of the Advisory Committee, then, is to be a multifaceted communication device between the Public Service Occupations Program and the community from which it draws its students, and into which it sends its graduates. Virtually every overworked administrator and teacher would agree that there are simply not enough resources of time, money, or personnel available to permit them to remain really aware of the constantly changing tools, techniques, qualifications, and hiring patterns of *any one* (not to say *all*) of the crafts, businesses, or professions. It is this void of information which the Advisory Committee is assigned to bridge.

The information exchange need is not one-sided, since a wisely selected and carefully directed Advisory Committee can also perform invaluable services in communicating the goals and needs of the Program. The Advisory Committee can thus secure for the Program, the support and cooperation it might otherwise be unable to obtain.

Size of the Advisory Committee

There can be no fixed rule as to the optimum size of an Advisory Committee. Some "rule of thumb" figures based on experience will be offered, as basic principles considered most important in determining number of members:

- Bear in mind the volunteer status of the Committee. It must be large enough so that its enthusiasm is not needlessly sapped by placing too heavy a workload on the individual members.

- The Committee should be large enough to insure its ability to communicate with all relevant sectors of the community, and to provide the District with expert advice on all facets of the Public Service Program.

- Typical matters on which the Program staff will seek the Committee's advice may deal with subjects on which well informed and reasonable people can, and frequently do, hold honestly differing opinions.

- Therefore, if the school or District is to secure the best opinions of an enthusiastic, working Committee as a foundation for decision-making, it must also create a Committee small enough so that every member's opinion can be heard, and within which honest and productive debate can proceed when it is necessary that a consensus be reached.

On the basis of the above criteria, it would appear that a Committee with between fifteen and twenty members should be appropriate. The size of the community and the diversity of the program have direct bearings on size, and in some cases may mandate a smaller Committee with as few as (or even less than) ten members.

Composition of the Advisory Committee

The composition of any Advisory Committee is one of the most critical elements affecting its success or failure. This is certainly true when establishing a Public Service Advisory Committee. The composition must be viewed as a dynamic model capable of adjusting to any need.

Public Service Agencies are changing constantly. There can be few things more embarrassing to a district, or more cruel to a student, than to discover that the acquired education is outdated. It is highly unlikely that any District, Department, or teacher making effective use of a properly established Advisory Committee will ever be in that not-so-rare predicament.

Since many diverse governmental agencies are a part of Public Service, it is thus a necessity that considerable judgment be

exercised in Committee selection. The personnel responsible for Committee composition and membership nomination at each level must always bear in mind, "What do we need to know to make and keep our program tuned to the times?" and "Who are the people who know these things?"

A properly oriented Committee comprised of persons truly knowledgeable in each of the Public Service occupational fields will provide the district with more than enough reliable information and imaginative suggestions. Such solid recommendations from the Committee can virtually assure that program planning, development, and maintenance processes are always relevant.

While there are no established criteria for the composition of Public Service Committees, the following guidelines could well be considered:

- The Committee members should be "decision makers" in their respective Public Service Agencies. A department head or business chief can open up many doors for a Public Service class.

- If the head of the Agency cannot make the necessary time commitment, the Manager should designate a suitable replacement. This alternate could report to the department or bureau chief when required, to keep all doors to the local Agency opened.

- A director or assistant director for personnel or training within an Agency will often make an excellent Public Service Advisory Committee member.

- When developing an *ideal* Committee, remember that committee size dictates a parsimonious approach in the selection of resource people. Choose people whose knowledge and skills

will complement each other.

- A conscientiously selected Committee, carefully oriented and imbued with a sense of responsibility, will invariably identify its own shortcomings and will move quickly to fill the voids in its own abilities. The Committee may do this either by suggesting additional membership, or by resorting to its own resource people.

Function of the Advisory Committee

The function of an effective Advisory Committee is determined by the needs of the program, as seen jointly by the teacher, the administration, and the Committee members. In those instances in which Public Service Advisory Committees are not functioning properly, the failure is often due to several factors, such as:

- The teacher and staff do not know how to work with the Committee;

- Committee members do not understand their role as advisors;

- Committee members are not aware of whom they are working with in the school system;

- There is no clear understanding of what the Committee's function is, or what the members can advantageously and properly do.

General functions of the Committee are in the areas of student recruitment, selection, and placement; student recognition; teacher assistance; public relations; and program instruction. Specific functions include such items as:

- Keeping school personnel informed on current requirements

relating to cluster curriculum;

- Assisting in the evaluation of the Public Service Occupations Program;

- Making recommendations as to community needs in the area of vocational education programs and courses;

- Assisting in community surveys;

- Acting as a sounding board for new ideas;

- Assisting in course and curriculum planning, including course content (in an advisory capacity);

- Providing advice on the selection and use of equipment and facilities needed for instruction;

- Assisting in developing appropriate projects when the project method is utilized;

- Providing input into the development of long-range plans;

- Assisting in conveying information to the community about the Program;

- Providing speakers to address trade and civic groups covering Public Service education and training program in the school;

- Participating in radio and television programs designed to promote Public Service career education programs;

- Providing assistance in preparing and printing informational publications designed for student recruitment and governmental employer groups;

- Serving as a source for securing community resources;
- Arranging for resource teachers from Public Service Agencies to assist regular teachers;
- Assisting in securing adequate training stations for students involved in the Preparation level of Public Service training;
- Arranging summer employment for teachers and/or Public Service students;
- Recommending criteria pertaining to Public Service employer expectations of students;
- Assisting in establishing realistic achievement levels for entry-level skills;
- Informing school personnel about current employment requirements relating to a given career;
- Providing prizes to outstanding students and groups;
- Assisting students in securing employment;
- Providing guidance in wage and hour problems;
- Providing financial assistance in certain instances;
- Acting as an instructor appraisal committee as the need arises;
- Participating in employer/employee banquets and other special functions.

This list is not inclusive, yet it does cover the major areas of concern. It is important to note that the success of the

Committee in carrying out these functions will depend on the ingenuity of the school representatives and the quality of the relationship of the school representative with the Committee chairman and individual members.

Forming the Public Service Advisory Committee

Much of the success of an Advisory Committee is determined by the manner in which it is formed. There are many ways by which Advisory Committees can be formed; however, the basic steps and procedures for organizing Advisory Committees have been well established. The suggested basic procedures which follow are drawn from numerous studies in several states where the use of Advisory Committees has been of long duration:

- Discuss the purpose, need, functions, organization, and conduct of Advisory Committees with appropriate school administrators, parents, and other patrons of the school. Concise, written, mission and goal statements for Committee establishment are suggested. General areas wherein Advisory Committees can be useful include:
  - The Committee can give advice, make recommendations, and provide service otherwise not available;
  - The Committee can interpret the Program to the Community and involve the community in education;
  - The Advisory Committee in no way usurps any of the prerogatives of the Board of Education, or the administrative, or teaching staffs -- this must be pointed out.

- Meet with the local school boards to discuss the question of organizing an Advisory Committee. Topics to be discussed with the Board might include:
  - Why do we need an advisory group?
  - How will the Advisory Committee be used?
  - Why organize a Committee at this time?
  - Who is responsible for the Committee?
  - What advisory and what policy decisions can the Committee make?

- Nominate, select, and appoint the Advisory Committee. There are no specific rules or formulae for nominating or selecting Advisory members. However, certain basic considerations must be kept in mind, such as the three alternatives shown in Figure 15, below:

Alternative A	Alternative B	Alternative C
(1) Obtain Board approval	X	X
(2) Develop criteria for selection	X	X
(3) Obtain suggestions from others	Establish temporary Committee	Board appoints nominating Committee
(4) Develop nomination list	Temporary Committee selects possible Committee members	Nominating Committee selects members to serve on the Committee
(5) Officially contact prospects	Contact prospects	Contact prospects
(6) Appointment by Board	Appointment by Board	Appointment by Board
(7) Notification	Notification	Notification

Figure 15 - Alternative Methods of Committee Member Selection

Working with the Advisory Committee

Success or failure of the Advisory Committee will be largely determined by the interface activities between the Coordinator and the Committee. Likewise, all other community contacts are equally sensitive to proper interrelationships.

It is essential that the Committee should be oriented to its role reflecting its advisory and consultative capacity. The advisory capacity should not be infringed upon -- the time consuming detailed work is not a part of the Advisory Committees function.

The maximum potential of the Committee can only be realized if the Committee is fully and accurately informed on the actions of the institution. To assure this, regular meetings must be held with prepared agendas; accurate minutes recorded, filed, and distributed to each member; and reports prepared and distributed on items under discussion.

A fundamental premise to be followed with the Advisory Committee, as well as the entire community relations program, is *honesty*. Be sure the group is honestly informed concerning activities. It is *not* advisable to provide only the positive aspects to the Group. If negative situations are encountered, inform the Group of the circumstance surrounding the situation, and seek its assistance in arriving at a solution. The "hands across the table" concept with business and Agencies must be viable to have quality educational programs.

Working with the Advisory Committee in an affective manner requires the ability to:

- Persuade, not pressure, and demonstrate leadership qualities,
- Perform in a diplomatic and professional manner,
- Be a good listener and respect the opinion of others,
- Be firm when the situation demands,
- Be consistent in operation and command respect,
- Be an effective communicator,
- Operate from a base of knowledge,
- Delegate authority and responsibility,
- Practice human relations at all times,
- Accept criticism,
- Plan and organize,
- Make valuable use of the Coordinator's time,
- Utilize effectively the resources available.

Advisory Committee Meetings

After the Committee has been appointed, and the meeting place for the first meeting has been arranged, the following topics could well be covered at the first meeting:

- orientation of the Committee;
- selection of officers;
- Committee operations;
- term of Advisory Committee member service;
- frequency of meetings;
- how vacancies are filled.

By the end of the first meeting the members should have a clear picture of the educational structure involved in the area in which they will be serving. They need to know again that their role is advisory in nature, and that their advice is being sought out with the intent of giving their recommendations careful consideration.

Getting off to a good start is the key to creating an effective and enthusiastic Committee. Involving the Committee in the program planning at the outset will help to insure success.

Committee members should be given a general orientation to the Public Service Career Cluster.

Remember that members of one occupational group, such as social services, may be totally unaware of either the existence, or the role, of other occupational groups in Public Service, such as transportation services, or resource management.

Follow-Up After Meetings

When the first meeting is over, several significant items must be accomplished if the Committee is to remain stimulated on a continuing basis and not become stagnant. The most crucial

element is follow-up. As far as the school representative is concerned, this is where the most important work begins. The following items deserve immediate attention:

- Write up minutes of the meeting and mail copies to members within 24 hours. These should be action minutes which include the actions taken, not what was said.

- The school representative should arrange a meeting with the Chairman within one week for a short session to evaluate the meeting. Even a very successful meeting should be evaluated to identify reasons for its success. Some of the items that should be considered include:
  - Was the Committee function clearly defined?
  - Were pre-planned objectives met?
  - Was the meeting conducted satisfactorily?
  - Was the preparation for the meeting adequate?
  - What products were accomplished?
  - What were the strong points of the meeting?
  - What were the weak points of the meeting?
  - What is a fundamental analysis of transactions?
  - What suggestions for improvement can be made?
  - Who should follow-through on special assignments? (The Chairman may want to do this.)

- Take necessary actions and recommendations.

- Transmit recommendations of the Committee to the School Board and to the Superintendent or Chief Administrative Officer.

- Send thank-you notes to special participants. (This is essential!)

Chapter 6

ARTICULATION OF PUBLIC SERVICE PROGRAMS

Chapter 6

ARTICULATION OF PUBLIC SERVICE PROGRAMS

BASIS FOR ARTICULATION COMPONENTS

Any school that implements the Public Service Occupations curriculum should develop an articulation component in conjunction. Development of such a component is a matter of importance to insure that the students receive relevant, comprehensive, and efficient training for their chosen occupations, with an understanding of the entry options available to them. Articulation is time consuming; however, there are distinct benefits:

- the schools will benefit by offering superior programs,
- the post-secondary institutions will acquire students with realistic expectations;
- the students will be equipped with the knowledge and skills necessary for employment in their chosen career.

Potential problems in curriculum coordination and student matriculation in a post-secondary institution can be anticipated. The procedures suggested for the local educational agency in this guide should either help prevent articulation problems from developing, or at least make them more manageable.

WHAT IS ARTICULATION?

A few terms are briefly described with regard to their usage herein. Although some readers may not agree with the definitions, they are presented in the interest of clarity and reference:

- *Articulation* refers to the relationships between educational programs which are designed to provide a smooth transition for the student from one educational program to another. This movement of the student between programs can be either horizontal or vertical;

- *Horizontal articulation* includes those relationships between programs, courses, or activities which exist at any one educational competency level and provide a coordinated educational program for the student.

- *Vertical articulation* refers to those relationships which exist between institutions, programs, courses, or activities, and provide a coordinated program for a student moving from one educational competency level to the next.

BENEFITS FROM GOOD ARTICULATION PROGRAMS

A good articulation program is built upon teamwork between the various levels of our education system. The school officials must assume a major responsibility for facilitating a continuous and efficient education program for their students. A strong articulation program will:

- insure that there are no gaps in the Public Service Occupations Curriculum;

- insure the minimum amount of duplication in the curriculum;

- interrelate the various areas of the curriculum;

- provide for a smooth transition from one institution to the next.

The transition from high school to college, or to the world of work, is difficult at best. If the articulation program is inadequate, many of the Public Service Occupations students may be side-tracked into other jobs or training programs. In some cases, students, out of necessity or ignorance, will accept the immediately available jobs, even though the wages are low and there is little opportunity for advancement. Others will be convinced by unrealistic promises to enroll in short-term training programs.

Post-secondary institutions, colleges, and employing governmental agencies will all benefit from a sound articulation program and from the resultant facility in flow of communication. The secondary school will serve both as a skills training center, and as a screening agent. This means fewer failures in college and on the job. A well-articulated Public Service Program should also provide governmental agencies with employees who do not need extensive training after they are hired.

Despite the fact that not much has been written about articulation between elementary, secondary, and post-secondary institutions, programs do exist that warrant study. For example, the physical education and athletic programs have well developed and good functioning procedures at the present time:

- the secondary coaches scout the junior high school,

- The high school athlete is in turn scouted by the college coaches,

- The professional teams then scout the college athletes.

It appears that the athletic coaches have worked out a strong articulation program for their students all the way through high school and college up to the level of the professional athlete. The students are given special guidance in the areas of college selection, admissions requirements and procedures, and financial opportunities. The coaches have a carefully articulated set of standards to use in evaluating both the students and the programs.

Other examples of articulation may be found in business education and child development programs. In most strong articulation programs, the flow of communication is from teacher to teacher, counselor to counselor, or administrator to administrator.

DEVELOPING AN ARTICULATION COMPONENT

ASSIGNMENT OF ARTICULATION RESPONSIBILITIES

A strong articulation program takes much time and work, and time must be allotted for the person assigned the responsibility. It is logical to assign a share of the responsibility to the teacher, the counselor, and the administrator. A joint effort between these levels provide the key to a successful articulation program, since these people have the most knowledge of the students, the curriculum, and the institutions through which the students must pass.

The Teacher's Responsibility

It is important that the teacher should assume a leadership role in articulating the Public Service Occupations Program -- the teacher is the most important ingredient in implementation of the curriculum.

The teacher is responsible for various phases of the Program:

- planning the classroom activities;

- scheduling speakers, field trips, and movies;

- ordering printed materials, books, or professional and trade journals.

However, the teacher must also be provided time and money for these activities.

If a Work-Experience Program is developed, the teacher must assume a major responsibility for the success of the program. A secondary student placed in an agency may be either a great public relations person, or a source of embarrassment to the school district. The school cannot afford to turn students loose upon Public Service agencies without first screening and training them as to what the employer may or may not expect and demand of them.

The teacher is the person in the best position to do the necessary screening, training, and orientation of the students, so that the students can be matched with the job situations that are available. The teacher needs to know what the daily routines of the receiving agencies are, and the personalities of the people involved. From this vantage point, the teacher can select the students for field placement. The teacher should evaluate the students' personal appearance, attitudes, personality, and marketable skills before placing.

Establishing these procedures for work-experience should help greatly in opening another valuable avenue of communication between the school and the community. In addition, it should help to orient the students so that any post-secondary training they pursue will be of greater meaning and relevance.

The administration and teacher will have to decide whether or not the field experience should be a paid or a non-paid experience. The students and the Agencies have a tendency to respond

more favorably to paid programs than to non-paid ones. This is evidenced in the students' attendance, attitudes, and willingness to enroll in the programs.

These Work-Experience Programs provide the students with valuable information relative to articulation concerns. The student can make more realistic career choices after a relevant work-experience placement. Therefore, the student is in a better position to decide about various post-secondary options. For example, a student's decision whether to enter employment immediately, or to attend a community college, may depend in part upon how well or how poorly the secondary and community college Public Service Programs are articulated.

The Counselor's Responsibility

The counselor's role in a good articulation program is much greater than merely programming the proper students into the class, or advising them of the occupational requirements. It also involves advising students concerning additional electives that would be of value in a Public Service career, and courses that must be taken for enrollment in a post-secondary training program.

Counselling Concerning College Admission Requirements - The fact that some colleges have rigorous entrance requirements, while others have open-door policies, is confusing. Students are often unaware of the fact that different colleges have different entrance requirements. It is all too common to overhear high school students say that they must have four years of a foreign language to go to any college, which of course is not accurate. One of the first responsibilities of a counselor is to see that the correct information regarding admission to the various Public Service Occupations training programs is in the hands of the students.

The counselors in the secondary schools need to develop procedures to aid in the articulation process. The vital link between the high school and post-secondary experience will be much easier for the students if the counselors establish appropriate procedures, such as these:

- College catalogs should be reviewed annually and updated, and old catalogs should be discarded. This should be done in the Library and Career Center, as well as in the counseling offices.

- The counseling office should distribute to students annually a handout outlining:

  - Enrollment procedures for the local community college, state colleges, state universities, and other public or private institutions that recruit a number of local students;

  - Dates by which applications for admission, scholarships, and loans; financial statements; transcripts; etc., must be sent to the college;

  - Entrance examinations that may be required for specific institutions, together with information on minimally accepted test scores (if known);

  - Financial pictures for each of the broad categories of colleges, and the outlook for scholarships, loans, and part-time employment;

  - Employment records of the graduates of the various schools;

  - The materials normally included in a student's transcript, with suggestions on methods for the student to

get them forwarded, and the cost for doing this.

- The counseling office should invite college representatives to the high school campuses to explain programs, and to let the students know that they are wanted and welcome.

Counselling Concerning College Populations - Counselors need to be alert to the practical requirements of supply and demand, in addition to the stated entrance requirements. Although the stated requirements may not change, the real requirements for being admitted may be different. One community college program that is popular may have a two-year waiting list. There is also a notable variance between the actual admission requirements of the different institutions within a state system, variations which may be partially accounted for by the number of students seeking admittance. The students need to be informed and advised of these variations at the time that they are considering applying for admission. They should also be made aware of other factors in addition to grade-point-average and entrance examination scores that they anticipate will be considered when they apply for admission. Volunteer work or activity with church groups, Boy Scouts, or Girl Scouts, are all considerations which assist in either acceptance or rejection of a student's application for admission to a program.

Counselling the Educationally Disadvantaged - A small number of the students in a Public Service Occupations class will be educationally disadvantaged. These students will need special counseling and guidance about enrolling or continuing in special training programs. They often have doubts about their ability and the wisdom of spending money for education beyond high school when they could be working and earning, instead of spending, money. Many of these students will never register for the entrance examinations unless they are given special encouragement to do so. The classroom teacher may encourage them, but if the counselor reinforces this suggestion, it is

much more likely to be followed. A team approach is by far the most effective. Both the teacher and the counselor should give the disadvantaged students all of the help possible to build their self-confidence. These students need to be aware of all the possible techniques for doing well on a civil service test. It is especially important for students wishing to work in Public Service to develop test capability and facility.

In some cases, counselors may need to contact the post-secondary institutions concerning students with special training or weaknesses to be sure that the students get the consideration that they should have. Sometimes the counselor may need to explain the secondary Public Service Curriculum to the individual at the receiving institution. Such personal contacts aid student's transitions from secondary to post-secondary institutions.

Continuity of Counselling - Program advisement should start in junior high school, and should be followed up annually in high school. During the senior year, when the student is preparing for entry-level Public Service work or advanced training, the counselor should review the student's planned program and high school record. Enrollment of the student in a Work-Experience Program presents another consideration that should be discussed and related to stated career goals and post-secondary training plans.

Counselling Concerning Transfer Credit - Community colleges offering both certificate and liberal arts transfer credit deserve special attention. Counselors must be careful to explain what is transferable and what is not transferable to the Public Service students. The counselors may prevent much misunderstanding and ill-feelings if they clearly communicate to the student the part of the Public Service program that articulates with selected community colleges.

Counselors have a significant and important role to play in the development and successful operation of any new program. Incoming freshmen or sophomores need to have the school's entire curriculum explained to them. The counselors must be the ones to do this since the teachers have their own responsibilities in the classroom. Students also gain much of their knowledge about curriculum from one another. However, when a new program is introduced, it falls upon the teachers and counselors to relay the information to the students. The Public Service Occupations title may be considered vague, and an explanation of course content is needed.

SUPERVISING CURRICULUM COORDINATION

Horizontal Articulation

Any new program in the secondary schools must be carefully articulated horizontally to avoid duplicating an already existing program. The Public Service Occupations teacher must know not only the scope and sequence of the other secondary programs, but which ones would have students who would enroll in the Public Service Occupations class. Even if there is a duplication of material, it is not a duplication of instruction if the students in the Public Service Occupations class have not had an opportunity to enroll in the other program. Adjustments in the curriculum may have to be made from semester to semester, if voids or overlapping of instruction are to be avoided.

The Work-Experience Program also needs horizontal articulation. Students who have been employed in city or county Work-Experience Programs should be informed of the Public Service Occupations Program, since they are likely to find it particularly helpful and meaningful. Other individuals, such as Directors of Neighborhood Youth Corps (NYC), should be asked to explain the Public Service Occupations Program to their students. This Program is designed so that the students should become

better workers as a result of their training in the class.

Another closely related area is "Work Study." If the Work Study Coordinator is contacted, he can possibly arrange for funding to be provided which will permit some Public Service students to gain work in governmental agencies. Team work is the key to a successfully articulated program.

Vertical Articulation

The administration must also be sure that the teacher, in implementing the curriculum, does so jointly with the educational systems which follow the secondary level. It is imperative that a team approach be developed, not only within the secondary system, but also between the high school and community college and the Agencies which have their own training academies. This is the only way to prevent duplication of programs, and to provide effective and efficient service to the students and the employing Agencies.

An innovative program being implemented in some districts is the sharing of facilities and staffs between two educational levels. Secondary counselors are serving on the staffs of community colleges during the evening hours as college employees. Counselors from community colleges are establishing regular visiting schedules to high school campuses. Similar arrangements can be made between junior and senior high school counselors. This sharing of staff should provide the following advantages:

- The secondary counselors would know the community college program, and have an understanding of and feeling for the problems and frustrations of the community-college students;

- The community-college counselors have the opportunity to get better acquainted with the high school programs, and to

deal directly with prospective students;

- The secondary-school students would obtain much more accurate information, since the secondary-school counselors are well informed, and community-college counselors are available for consultation.

High school students are permitted to enroll in many of the technical and trade programs in the community colleges throughout the country, providing yet another facet to the articulation process. It may be well to investigate the opportunities for allowing the enrollment of selected high school seniors in selected community college Public Service training programs. Such programs might include training for recreation aide, teacher aide, or fire science technician.

Another suggestion for administrators is to make provisions for Public Service field trips, which provide opportunities for the students to observe actual work environments. For example, at one demonstration site, a number of students, who had indicated an interest in working with the mentally retarded, changed their minds abruptly when they visited a facility for the mentally retarded. Conversely, other students who had never considered such work, took an interest in it. Experiences of this sort are only possible if the budget permits the necessary transportation.

IMPLEMENTING AN ARTICULATION COMPONENT

WORKING WITH THE ADVISORY COMMITTEE

The first step in implementing a sound articulation procedure (establishment of an advisory committee) has already been discussed. At about the same time, a survey should be taken of the students enrolled in the class to determine areas of key interest. Then contact should be made with training directors or personnel directors of the Agencies related to those interests. These people could be invited to join and serve on the Advisory Committee as well.

SURVEY PRACTICES AND PROCEDURES

The second step in initiating a sound articulation procedure would be to visit Public Service Agencies. There should be a discussion of the actual training that workers in that field are given when they are hired. Many options are open for students going into different levels of Public Service. This makes the articulation process both nebulous and difficult to define and describe adequately.

Law Enforcement Agencies

Law enforcement, for example, is always a popular area among Public Service students. The teacher could go to the local police academy and ascertain the entrance requirements, training provided, and the most needed attributes for high school graduates who desire to be qualified for admission to training.

In law enforcement, a student has basically five options open to him:

- First, he could apply for admission to a police cadet program. If accepted into the program, the cadet would receive an excellent and helpful experience which might lead to the probability of becoming a police officer at the age of 21 (18 in some areas).

- If the student is unable to get experience in this area, another beneficial option would be to enlist in the Armed Forces, and request military police training. Then, at expiration of his tour of duty, he could apply for a position as a law enforcement officer. Selection of this option would not only provide prior training and experience, but give valuable veteran's preference points in civil-service examinations.

- A third option is for the student to enroll in a community-college police-science course. In addition to providing much good academic knowledge, the course is frequently taught by a police officer from one of the local police departments. This contact may be very valuable in providing advance information about the civil-service examination. It may give the student ideas concerning what may be expected during the personnel investigations and interviews of the police department.

- A fourth option would be for the student to enter a four-year program majoring in a field such as criminology. Students in such a program would graduate at about the time that they would be old enough to become police officers. A degree will be almost a necessity to obtain certain administrative positions in police departments, or for employment in certain federal law enforcement or investigative agencies. Furthermore, the education would certainly help in the written examination.

- A fifth option used by many students in the past is to seek employment in private sectors until they are old enough to apply for the desired position. Some become reserve officers as soon as they reach the minimum age, with intention of obtaining the maximum amount of information in preparation for the police examinations.

With the possibility of all these options, what does the Public Service Occupations teacher do?

- The teacher should initially search for experiences or information relevant to avenues of obtaining employment on the police force. Many times extracurricular activities should be suggested and recommended. Police Explorers' Posts of the Boy Scouts should not be overlooked by students interested in becoming police officers. The Police

Explorers' Posts, sponsored by the police, will provide "ride alongs" for the cadets. Such clubs can provide contacts and openings for cadets enrolled in them, that are not available to other students.

- A second step is for the teacher to alert the students to programs of community colleges and four-year schools. This orientation will include physical, mental, and academic training. Students need to be informed that even though they may be college trained, they will still have to finish police academy training, although prior college training will probably make academy instruction easier for them. However, the academy serves more than a training purpose, since it is also a screening device, affording the Department an opportunity to evaluate recruits during mental, physical, and academic stresses.

Fire Departments

The fire department is another area in Public Service of particular interest to students. People who are 18 years of age are eligible to take the examination for fire fighters in most localities, although competition is intense. This needs to be pointed out to the students. It is also necessary that the students should be oriented concerning the academic content of the fire science curriculum at community colleges. This curriculum includes such stringent subjects as fire fighting procedures, chemistry, and physics of fire fighting, as well as the necessary stringent physical requirements.

Community relations departments of most fire departments are normally very cooperative in furnishing guest speakers, who are excellent sources of information for students seeking employment in this area.

Enlistment in a branch of the Armed Forces may be another excellent

avenue to pursue for students who are interested in becoming fire fighters. The Armed Forces train many men in this field. As mentioned for the Police Department, preference points granted to veterans in civil-service examinations may well make the difference in gaining employment of this type.

Rescue Posts of the Boy Scouts' Explorers' Posts are the parallel for firefighters to the Police Explorers' Post, previously mentioned.

Members of Search and Rescue Posts have shown excellent records of obtaining positions with fire departments. There is tremendous competition for these jobs.

PROGRAM COORDINATION FOR POST-SECONDARY EFFORTS

Preparing Students for Immediate Work Entry

Many students in the Public Service Occupations classes may not immediately continue their education beyond high school. They need to be ready for entry-level Public Service work when they finish high school. Some of these students will be applying directly after graduation for entrance into the local police academy, or for fire-fighting inservice training.

The teacher needs to do everything possible to assist them in this transition. Such help begins with simple things such as having their names placed on the list for notification when there are job openings, and examinations are to be given. Previous Public Service examinations should be obtained, not to drill the students on the questions used, but to acquaint them with the format of the tests. The teacher should provide assignments to determine the students' basic skills. If deficiencies are found in some areas, the instructor should so inform the students. The teacher can suggest methods for them to improve their skills to a level where they will be able to

compete for the careers that they want.

Program Coordination with Community Colleges

Some of the students in the Public Service Occupations classes will want to continue their education beyond high school. The teacher should create an awareness in students of the opportunities to be found in community colleges.

However, if the articulation process is to be complete, the students must also understand that there are great differences to be found within community colleges. Some courses are transferable to a four-year school, while others are not. The student who states that he has no interest in going on to a four-year school may later change his mind, and be very unhappy. This will be particularly true if students discover at the beginning of their third year of college that they have spent the first two years in a nontransferable technical program. Obviously, the teacher needs to verify the status of each of the specific courses.

Program Coordination Between Secondary and Post-Secondary Schools and Employing Agencies

The teacher also needs to know the quality of the program and the connections that the various programs have with the employing agencies.

Coordination of the curriculum in the Public Service Occupations class with other related curriculum is important. There should not be an excessive duplication of instructional material, yet many educationally disadvantaged students in Public Service classes will need developmental course-work to prepare them for community college programs.

The coordination problem is even greater in other areas, such as the recreation aide program. Some students have failed to

pass civil service examinations because they did not know the rules of baseball. Normally such data are included in the curriculum taught in physical education classes at the secondary level. In some cases, curriculum voids can contribute to the student's losing a job opportunity. Many groups of Public Service workers must demonstrate a knowledge of first aid, which is also normally included in secondary physical education classes. These areas need to be articulated within the secondary school, as well as with the post-secondary institutions. The secondary school teachers and counselors need to know what course content has been included in previous civil service examinations, if they are to be in a position to properly evaluate and advise students.

Students in the Public Service Occupations class who wish to become social workers or social worker aides often have no idea of what the actual work entails. An introduction to social work, psychology, and sociology may be very helpful for these students. They should be provided with enough simulated experiences to get a "feel" for the work that they will encounter. This should include the frustrations as well as the rewards.

The semi-professional careers that are available in urban planning, administration aides, housing, are other areas that require special attention. Some paraprofessional programs may have different labels in different areas. A student with an AA degree as a psychiatric technician may find the best employment market in one area is an institution for the mentally disabled or retarded. Yet in another community, individuals with similar training and employment skills will have been trained in an institutional child-care program. Articulation of all of these programs with the Public Service Occupations class is no easy task. The secondary school officials must take the time to carefully obtain a listing of all the programs in their locality and maintain effective contact and communication with the directors of these programs.

Program Coordination with Four Year Colleges

Four-year programs, in many respects, do not offer the same articulation problems as the paraprofessional programs in the two-year community colleges. The four-year schools have traditional systems that are well known and respected. The counselors will advise students who plan to attend four-year colleges on the entrance requirements and college expectations.

One of the most helpful activities which the Public Service Occupations teacher can do for academic students is to provide them with field experiences in their chosen areas. Most of the college programs do not offer the students a field experience until they are in the fourth or fifth year of college. It may prove very beneficial for the students to obtain this kind of experience while in high school. It may add depth of meaning to the college program and give the students a better idea of what they are training to become, as well as offer the possibility of supplementing their income while they are in college.

Again, the teacher needs to gain the expertise to evaluate the programs of the various colleges in the community. A knowledge of the school and faculty will also enable the instructor to give the students some idea of the academic work that will be required.

Credentials and licenses are another aspect that need to be examined. Obtaining a credential is a hurdle that all prospective teachers encounter. Public institutions which train teachers must have their curriculum approved and correlated with the State's credential requirements. Problems are most likely to develop for the students who plan to teach in other states, or who plan to attend private institutions after high school. Accreditation is a factor that must be brought to their attention.

Credentials and licenses are the end product of many training programs. A sound articulation program can eliminate most of the frustrations and disappointments for the graduates seeking to enter their chosen professions.

CURRICULUM COORDINATION TECHNIQUES

The best place to start in developing a procedure for coordinating curriculum is to work with the local Advisory Committee. The Public Service practitioners are usually qualified to evaluate the Public Service training programs with post-secondary institutions. They know which curricula are doing the best job of preparing the students with marketable skills. After establishing the curriculum which should serve as a model, the secondary officials need to compare all of the curricula to see what common elements there are and what is missing in the more inferior programs. The Advisory Committee will undoubtedly provide valuable suggestions of its own as to what should and what should not be included in the Public Service curriculum at the secondary level.

The second step to be taken by the teacher is to contact the community college officials, obtain course outlines, and discuss coordination with the instructors of the programs. Only when the secondary school teachers understand the scope and sequence of the college program can the two curricula be so interrelated and interdependent that there will be no voids or excessive overlapping of material. Since no two college curricula are likely to be the same, secondary school officials must often take a "middle-of-the-road" approach, and the teacher should use the program which is most likely to be selected by the majority of the students. Then the instructor can prepare students for a specific program, yet be general enough so that other students enrolling in similar programs will not have too much difficulty in making the transition from secondary to post-secondary institutions.

The Advisory Committee or Area Articulation Committee, whichever is established, may be the instrument that provides the teacher with information for dissemination to students. It is difficult for the teacher planning a curriculum to leave the classroom to make and keep the necessary appointments, and obtain access to all of the program directors or instructors. A key committee member who works in a community college or agency can be of great help in making the necessary appointments for the teacher and assisting in the procurement of course outlines and other pertinent information, with consequent saving of time and avoidance of lost motion.

In addition to scanning the program texts, course outlines provide an excellent overview of courses. The teacher may thus obtain a good comprehension of what is expected of the students when they enroll in the college program.

Professional and trade organizations, and their professional or trade journals, provide another important means of articulating the program to the world of work. In addition to keeping the teacher abreast of developments, they are of interest to students.

COMPILATION OF NEEDED INFORMATION BY THE TEACHER

Entry Requirements

The Public Service teacher needs to compile, and maintain in a current state, much information and keep it available and usable to the students. Perhaps the most important information to have readily available for the students is a complete listing of entry requirements, not only into the careers of their choice, but also into the training programs for those careers.

Personal Requirements

There are often special requirements that a student would not

think to inquire about if they were not pointed out to him. Physical requirements such as age, height, weight, vision, and health, with psychological characteristics, all affect job placement. These facts need to be pointed out to the secondary students as they make their plans for the future.

Competition

Another item that should be included in the information compiled is the intensity of competition for the various Public Service occupations. If possible, the teacher should assemble a file of previous examinations. If that is not feasible, the instructor could build a library of civil-service preparation books (such as those published by ARCO). These will provide students with an idea of the format and content of the examinations that they will have to take to obtain a position in Public Service.

Academic Requirements

Program requirements are often different from institutional requirements for admission. For example, academic requirements may well require that the student should have certain mathematics or science courses in high school.

Advanced Standing

Another articulation problem is determining whether or not a student will be able to enter the college with advanced standing because of prior Public Service training in high school. If transfer of credit is not available, students need to be informed of this at the time that they enroll in the secondary Public Service Program. If advanced standing is granted, that fact should be made known to prospective students.

Does the advanced standing constitute permission to enroll in advanced courses, or is it college credit for the Public Service

course completed in high school? Would all of the students who completed the Public Service course in high school automatically qualify for the advanced college course, or would they have to pass qualifying tests? There appears to be no uniform procedure at this time.

Institutional Requirements

Institutional requirements must also be considered early in secondary experience. Certain courses may be required for admission, and many colleges have deadlines for applying for admission. One of the first things that seniors in high school should do in addition to applying for admission is to register for, and take, the entrance requirements examination. This is most often the Scholastic Aptitude Test (SAT). Public Service students interested in college should also file a Family Financial Statement for consideration, together with their scholarship application.

The teachers of Public Service Occupations programs need to provide accurate and timely guidance about the deadlines, grade-point-averages required, and possible scholarship grants that are restricted to students entering Public Service occupations. Teachers and counselors need also to be aware of those scholarships which are limited to students who plan to attend only two years of college. This is an especially important point for teachers working primarily with disadvantaged students.

Many disadvantaged students do little planning for the future and may not value such a long-term career plan. These students need a great deal of encouragement to apply for the scholarships that are available for students entering Public Service occupational programs. Both the counselor and teacher need to take the time to encourage all students, but especially the disadvantaged students, to apply for these scholarships.

Residence Requirements

Residence requirements need to be explained to the students in a well articulated program. The locality in which students reside determines those community colleges they are eligible to attend without paying tuition. It also determines whether or not the student may attend higher institutions without paying out-of-state tuition.

However, students seeking Public Service occupations need to understand one point. If a local community college does not offer the program desired, no tuition will normally be charged if the student does attend another community college that offers that program.

Student Services

The area of student services is another factor that needs to be explained. The secondary school can assist students by informing them before they leave for college what resources will be available in terms of help. Counseling services need to be explained. If students have the initiative to seek out a counselor at the college level, they will most likely be directed to the best source of help on campus for their needs. Tutoring, financial assistance, clubs, and developmental programs are usually available, but too often the freshmen do not find out about them in time to benefit from their availability.

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Project Staff

Patrick J. Weagraff, Ed.D. ..... Director
James J. Lynn, M.S. ..... Curriculum Specialist
Harold M. Blue ..... Senior Editor
Ronald W. Bertoli ..... Illustrator
Miriam Dong ..... Typist
Lillian Deger ..... Typist
Mary Sullivan ..... Typist
Karen Mason ..... Reproduction Typist

GPO 693-477/277

ACCESSION NUMBER: VT102221

PUBLICATION DATE: JUN75

TITLE: EXPLORATION OF PUBLIC SERVICE OCCUPATIONS. CURRICULUM GUIDE.

DESCRIPTOR: *CURRICULUM GUIDES; *PUBLIC SERVICE OCCUPATIONS; *JUNIOR HIGH SCHOOLS; *CAREER EDUCATION; *SOCIAL SCIENCES

IDENTIFIER: CAREER EXPLORATION

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 308P.; RELATED DOCUMENTS VT 102 220 THROUGH VT 102 226 IN THIS ISSUE.

ABSTRACT: THIS CURRICULUM GUIDE IS ONE OF A SERIES DEVELOPED AS PART OF THE PUBLIC SERVICE OCCUPATION CURRICULUM PROJECT TO ASSIST IN THE IMPLEMENTATION OF CAREER EDUCATION PROGRAMS CONCERNED WITH PUBLIC SERVICE OCCUPATIONS. THIS GUIDE CONSISTS OF 17 UNITS AND CONTAINS THE BASIC CONCEPTS AND INSTRUCTIONAL MATERIALS RECOMMENDED FOR THE EXPLORATION OF PUBLIC SERVICE OCCUPATIONS AT THE JUNIOR HIGH SCHOOL LEVEL. THE SUBJECT MATTER IS ORIENTED TOWARD TEACHERS WITH MINIMAL TRAINING OR EXPERIENCE IN PUBLIC SERVICE OCCUPATIONS EXPLORATION. EACH UNIT CONTAINS INSTRUCTIONAL OBJECTIVES, TEACHER INFORMATION FOR COURSE CONTENT, AND SUGGESTIONS FOR TEACHING MATERIALS THAT WOULD BE HELPFUL IN DEVELOPING THE UNIT. EVERY UNIT ALSO CONTAINS TEACHER AND STUDENT ACTIVITIES THAT WILL ENABLE STUDENTS TO DEVELOP AN UNDERSTANDING OF THE ATTITUDES, VALUES, AND CHARACTERISTICS WHICH PERTAIN TO MANY CAREERS IN PUBLIC SERVICE. UNITS ARE DESIGNED TO BE PRESENTED IN SCIENCE, SOCIAL SCIENCE, POLITICAL SCIENCE AND/OR MATHEMATICS CLASSES IN GRADES 7, 8, OR 9. APPENDED ARE A LIST OF RESOURCE SUPPLIERS AND SUGGESTED EVALUATION QUESTIONS FOR PRETESTS AND POSTTESTS. (AUTHOR/LJ)

CONTRACT NUMBER: OEG-0-71-4780(357)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402. (STOCK NUMBER 017-080-01432-7)

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. VOCATIONAL EDUCATION SECTION.

SPONSORING AGENCY NAME: BUREAU OF OCCUPATIONAL AND ADULT EDUCATION (DHEW/OE), WASHINGTON, D.C. DIV. OF RESEARCH AND DEMONSTRATION.

VT 102 221

Exploration of Public Service Occupations

VT 102 221

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C., 20402

Stock No. 017-080-01432-7

Exploration of Public Service Occupations

by:

California State Department
of Education
Vocational Education Section
Program Planning Unit
Sacramento, California 95814

in accordance with:

U.S. Office of Education
Bureau of Occupational and
Adult Education
Division of Research and
Demonstration
Curriculum Development Branch
Grant No. OEG-0-71-4780 (357)

June, 1975

This document is one of a series of curriculum guides dealing with the Public Service Occupations career cluster. The titles of all individually available documents in this series appear below:

Exploration of Public Service Occupations
Orientation to Public Service Occupations
Preparing for Public Service Occupations—Common Core
Preparing for Public Service Occupations—Educational Services
Preparing for Public Service Occupations—Law Enforcement Services
Preparing for Public Service Occupations—Social Services
Administering Public Service Occupations—An Implementation Guide

The project presented or reported herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

Developed pursuant to grant No. OEG-0-71-4780
by the California State Department of Education
Vocational-Technical Education Curriculum Laboratory
Sacramento, California
Funded by the U.S. Office of Education under
Part I - Curriculum Development in Vocational and Technical Education
Vocational Education Amendments of 1968,
Public Law 90-576
1975

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INTRODUCTION

This Curriculum Guide, *Exploration of Public Service Occupations*, is one of a series developed to assist those involved in implementing career education programs concerned with public-service occupations.

The Public Service Occupations Curriculum Project staff, in conjunction with a group of nationally prominent persons with expertise in local, state, and federal government, as well as in secondary and post-secondary education, has adopted this definition for public service, which is applicable to the entire series of Curriculum Guides developed as part of this Project:

> Public-service occupations are those occupations pursued by persons performing the functions necessary to accomplish the mission of local, county, state, and federal government, excluding the military service and trades requiring an apprenticeship. These missions reflect the services desired or needed by individuals and groups...and are performed through arrangements or organizations established by society, normally on a nonprofit basis, and usually supported by tax revenues.

This guide consists of seventeen units, and contains the basic concepts and instructional materials recommended for the exploration of public-service occupations at the junior high school level. The subject matter is oriented toward teachers with minimal training or experience in public-service occupations exploration.

Each unit contains instructional objectives, teacher information for course content, and suggestions for teaching materials that would be helpful in

developing the unit. Every unit also contains teacher and student activities that will enable students to develop an understanding of the attitudes, values, and characteristics which pertain to many careers in public service. The student activities have been designed to be duplicated for student use.

The Exploration Guide materials can be taught as a separate course or infused into the regular program. For example, a science teacher may wish to use the unit *A Clean Environment for All* to introduce the study of ecology, thereby adding relevancy to the regular school curriculum.

The material in this guide has proven effective in team teaching situations. While most of the units may be taught in social studies and science classes, activities within the units may be taught in mathematics, language arts, physical education, and health classes as well.

Although the units are presented in sequential order, each unit is designed to stand alone as a separate body of knowledge. All of the information is suggested only, and should be adapted to meet local conditions and needs.

This document was prepared by the California State Department of Education, Vocational Education Section, Program Planning Unit, which was then under the direction of E. David Graf. The major responsibility for the coordination of this guide belongs to Constance Friend Gipson, Curriculum Specialist, Public Service Occupations Curriculum Project.

A wide range of suggestions and approaches to the subject were received and wherever possible, incorporated into the final document. Since the resulting materials represent many opinions, no approval or endorsement of an institution, organization, agency, or person should be inferred.

Patrick J. Weagraff, Ed.D.
Project Director

ACKNOWLEDGEMENTS

The completion of this career education guide depended upon the assistance, advice, and cooperation of many individuals. The California State Department of Education, Vocational Education Section, Program Planning Unit, wishes to acknowledge in particular the contribution of the following individuals:

Dr. William E. Burns
Professor of Education
State University College at
Buffalo
Buffalo, New York

Mrs. Katherine Crowder, Instructor
Don Julio Junior High School
North Highlands, California

Dr. Ronald Detrick
Director of Career Education
San Diego City Schools
San Diego, California

Mr. Irvin Gartner
Associate Director
Berkeley Executive Seminar Center
Berkeley, California

Mr. Joseph Griffo, Chairman
Social Studies Department
Sweet Home Junior High School
Amherst, New York

Mr. John Hastings
Social Studies Team Leader
Oswego Middle School
Oswego, New York

Mr. Alfred Koch
Curriculum Coordinator
Rawlins Public Schools
Rawlins, Wyoming

Mr. Andrew Korim
Public Service Specialist
American Association of Junior Colleges
Washington, D. C.

Dr. Nellie Love
K-12 Curriculum/Instruction Coordinator
Sweet Home Schools
Amherst, New York

Mrs. Emily Mast
Special Consultant
Sacramento, California

Mr. Edward W. Matott
Science Team Leader
Oswego Middle School
Oswego, New York

Mr. James Mayo, Director
Regional Occupational Centers
Fremont-Newark ROP
Fremont, California

Mr. Fred Miller, Director
Institute for Regional Affairs
Wilkes College
Wilkes-Barre, Pennsylvania

Dr. Charles E. Parker, Specialist
Curriculum and Data Development
Utah State Board of Education
Salt Lake City, Utah

Dr. William Thomas, Dean
Experimental Education Programs
University of California
Los Angeles, California

Dr. James Wykle
Education Program Specialist
Bureau of Adult, Vocational, and
Technical Education
U. S. Office of Education
Washington, D. C.

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Unit 1

GOVERNING OURSELVES IN A REPUBLIC

This unit is designed to be presented in
Social Science Classes, Grades 7, 8, or 9

Here are the contents of Unit 1 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

CONCEPT 3

INSTRUCTIONAL OBJECTIVES 3

CONTENT 3

- Responsibilities of Elected Officials
- Responsibilities and Privileges of the Citizens
  - The Citizen Can -
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    - Change Public Opinion
    - Work in Political Parties
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Unit 1

GOVERNING OURSELVES IN A REPUBLIC

CONCEPT — EVERYONE IS A PART OF GOVERNMENT

INSTRUCTIONAL OBJECTIVES

1. Ability to define democracy.
2. Ability to define a republican form of government.
3. Ability to list at least six ways in which citizens can play active parts in government.

CONTENT

Americans live under a system of self-government or self-rule. Majority rule is necessary to the success of this system. In a true democracy, every citizen would vote on every issue, whether it was a state, local, or federal concern. Since this would be unrealistic and awkward, the American system is a *Representative Democracy* or a *Republic*. Under a republican form of government, all citizens can vote for the persons who they feel are best qualified to represent them.

Responsibilities of Elected Officials.

All elected officials have the responsibility of carrying out the wishes of the people in their districts, or *constituents*, as they are known. Senators from states with large agricultural interests pay particular attention to laws that will affect the people "back home." Representatives from manufacturing areas watch legislation that will affect the industrial plants in their areas. Any legislator or town council member who fails to "keep a finger on the public pulse" faces the prospect of losing the next election. Indeed, in some states officials can be recalled or removed from office if a majority of citizens feel they are not doing their duty. The President and state Governors can also be removed from office by the process of "impeachment."

Legislators not only represent the people, but they assume leadership roles as well. After studying all sides of an issue, they must vote in a manner that will be of benefit not only to the progress of their area, but to the entire population that their body serves. Consequently, they are sometimes placed in conflict when they feel one way about a bill and their constituents feel the opposite way. They must then decide whether they will vote the way their consciences dictate, or whether they will go along with the people they represent.

Most legislators try not to be too far ahead or too far behind the opinions of their constituents. However, public opinion changes constantly. Legislators who ran on a segregation ticket years ago may find that their constituents favor integration four years later. Therefore, they must keep in constant touch with their people to know how to cast their votes. Some legislators try to solve this problem by sending out questionnaires on current issues. Public opinion polls are being used more and more to gauge public sentiment.

Responsibilities and Privileges of the Citizens.

Citizens can take the initiative in letting lawmakers know how they feel. Well-written letters from sincere people cannot be ignored, because people who take the time to write letters to Congressmen or City Councilmen must be concerned. A flood of letters or telegrams concerning a problem tells a legislator that the people in that area have strong feelings about that issue. Officials often receive mail supporting and opposing a law. They then must assess how many people are for and against that law.

The Citizen can Join Pressure Groups. What do citizens do when they disagree or would like to see things handled differently? Some join pressure groups or lobbies that seek to influence legislators directly. Often called the "Third House" of Congress, lobbies furnish information to legislators in order to sway their votes. They prepare legislation which is introduced by legislators friendly to their cause. Occupational, environmental, educational, and civil-rights groups all lobby to get the legislation they feel will benefit them.

Although legislators listen to pressure groups, most try not to be unduly influenced by them. A heavy letter writing campaign started by a lobby can cause a legislator to vote for a bill when the majority of people are against it.

Legislators need the information lobbyists have, but there are dangers in lobbying. Some lobbyists have attempted to bribe legislators through money and gifts. The *Federal Regulation of Lobbying Act* passed in 1946 requires lobbyists to register, and to name the group they are representing, their salary, and the

amount of money spent on influencing legislation. However, it is unlikely that lobbying will be outlawed, since it is considered legal under the right to *petition*, as discussed below.

Lobbies also put pressure on government agencies directly. For example, environmental agencies are under pressure from conservation groups, and the Maritime Board may be under pressure from the shipping industry.

The Citizen can Petition the Government. Under the First Amendment, all Americans have the right to petition their state, federal, and local governments. In many of the states, voters can sign petitions to have laws referred. If five to ten percent of the voters sign, the law is placed on the ballot and is voted on by the people in the next election. This is called a *referendum*.

Sometimes citizens propose legislation that they wish passed. In some states, if a certain percentage of voters sign a petition to propose a new law, the issue is placed on the ballot and is voted on in the next election. This is called an *initiative*.

Although the use of the Referendum and Initiative relieves lawmakers of decision-making, they do cause long ballots. They also place people in the position of voting on issues on which they are not well-informed.

The Citizen can Change Public Opinion. Many citizens try to change legislation by influencing public opinion. Under a dictatorship, public opinion is controlled by burning books and imprisoning people who disagree. Under a democracy, different points of view can be aired openly. Newspaper editors and cartoonists frequently attack the government if they disagree. Citizens are encouraged to write letters to the editors, stating their views for publication. Handbills are passed out from door to door, and telephone campaigns can be used to garner support. Radio and television stations have programs that allow citizens to talk about government problems. Some Americans climb up on soap boxes and give speeches in parks and other public places. Some carry signs stating their opposition to ideas and candidates, while others join groups to demonstrate their concern. Bumper stickers and signs have been effectively used in gathering public support for or against an issue.

The Citizen can Work in Political Parties. Many people take an active part in government by becoming involved in party politics. They do not only help to select the party's candidates, but they also select the *planks*, or goals, in the party's platform. Workers are needed by parties to address letters, to run errands, and to raise money for political campaigns. Younger people have been effective in ringing doorbells and informing citizens about candidates and issues.

Cities are usually divided into precincts which are under the direction of a precinct captain. Precinct captains work hard to get the vote out in their areas. A group of precincts forms a ward run by a ward committeeman selected by the precinct captains. Each party has local, state, central, and national committees who work in their party's behalf. Some party workers are selected to attend the party's national convention, where the party nominees for President and Vice-President are selected.

When citizens feel that the major parties do not properly approach the issues in which the people are interested, they sometimes form a third party to get their ideas across. Although third parties usually lose, they may accomplish their mission if a major party adopts their ideas.

The Citizen can Run for Office. Some people enter politics by announcing for Governor or President. Although their chances of winning are slim, they draw attention to their ideas by making campaign issues of them.

The Citizen can Challenge Policies in Court. Any citizen who strongly disagrees with governmental policies can challenge them by taking a test case to court. These cases are often heard by the Supreme Court. In 1954, the case Brown vs. Board of Education of Topeka, the Supreme Court outlawed school segregation. In Miranda vs. Arizona, the court decided that before suspects are questioned by police, they must be informed of their rights. These court decisions have had profound effects on the American way of life.

The Citizen can Vote. The most significant way citizens participate in government is by casting their votes in elections. Under our system, every vote is important. In fact some elections have been won by one vote. Unfortunately, many Americans neglect to vote, giving up their chance to have a voice in government. Consequently, less than half of the population often decides what the policies of their government will be and who will put those policies into effect. Since all eligible citizens have the right to vote, they also have the responsibility of casting their votes in every election.

TEACHER MANAGEMENT ACTIVITIES

- Divide the class into two political parties. Each party will have a platform. (Example -- What rights should students have?) Small groups of students can form pressure groups to get their ideas in the platform.

- Choose the best party symbols and slogans from those done in the relating activity.

- Have each party compose songs for its campaign.

- Ask each party to select nominees for President, Vice-President, etc., on the basis of campaign speeches.
- Have an election, selecting the President, Vice-President, Councilmen, Senators, etc.
- Discuss the winning platform in relation to School Board policy.
- Ask a member of the School Board to discuss the policies of the Board that pertain to students.
- Tabulate the results of a student public opinion poll (such as, "What length of hair should boys be allowed to wear?").
- Explain the use of samples in polls.
- Ask students to circulate a petition to gather support for their cause and present the petition to the Student Council:

  Direct students in preparing a Referendum against a rule they do not like;

  Direct students in preparing an Initiative to put a new rule into effect.
- Assign each student to write a letter-to-the-editor for or against an issue.
- Ask precinct workers, ward committeemen, etc., to serve as resource persons.
- Invite representatives from lobbying groups to speak before the class.

RESOURCES

BOOKS:

Sweet Land of Liberty, Denoyer-Geppert, 1969.

Milestones to American Liberty, J. G. Ferguson, 1970.

Our American Government Today, 2nd Edition, Prentice-Hall, 1969.

The Constitution of the United States, Our Charter of Liberties, American Book - Van Nostrand, 1969.

The People Govern and Supplement, Follett Educational, 1970.

Government By The People, Steck-Vaughn, 1970.

We The People, Benefic Press, 1969.

We Are The Government, Doubleday, 1969.

Our Democracy, Steck-Vaughn, 1970.

Our Democracy at Work, 2nd Edition, Prentice-Hall, 1969.

Citizenship In Action, 4th Edition, Follett Educational, 1970.

Your Life As A Citizen, Grade 8, (Workbook), Ginn and Company, 1969.

Your Life As A Citizen, Grade 9, Ginn and Company, 1969.

Rights and Duties of Citizens, Books 1 and 3, Frank E. Richards, 1970.

Politics: The American Way, Allyn and Bacon, 1969.

Dissent and Protest: Case Studies for Student Discussion, American Education Publications, 1970.

Practical Political Action, '70 Edition, Houghton-Mifflin, 1970.

Municipal Politics: Interest Groups and the Government, American Education Publications, 1970.

PRINTED MATERIAL:

Citizenship Is Involvement, Signal Press, 1970.

Why Vote, Signal Press, 1970.

You are a Lobbyist, Signal Press, 1970.

FILMSTRIPS:

Basic Ideas of Democratic Government, McGraw-Hill, (color), 1969.

Taking Part in the Government, Curriculum Materials Corporation, (color, purchase), 1969.

The Rights and Duties of Citizens, Eye Gate House, (color, sound, purchase), 1970.

Being Active in the Government, Curriculum Materials Corporation, (color, purchase), 1969.

Black Political Power, Doubleday, (sound, purchase), 1970.

The Third House - Washington Lobbyist at Work, Harcourt Brace Jovanovich, (color, sound, purchase), 1969.

Beginning of Political Parties, Society for Visual Education, (color, purchase), 1969.

Political Parties and Elections, McGraw-Hill, (black and white, purchase), 1969.

Political Parties, Society for Visual Education, (color), 1969.

Political Conventions: Choosing the Candidates (Parts 2), Harcourt Brace, (sound, color, purchase), 1969.

The Young Citizen Looks at Politics, McGraw-Hill, (color), 1969.

Helping Our Town Government, Curriculum Materials Corporation, (color, purchase), 1969.

The Ballot, Universal Educational and Visual Arts, (color, sound), 1969.

Using the System: A Summary, Doubleday, (sound, purchase), 1970.

FILMS:

Man Learns to Govern Himself, Eye Gate House (8mm Loop, color, purchase), 1970.

The People of the State Enact, Jam Handy, (29 min., color), 1970.

Pollsters and Politics, Association Films, (26 min.), 1970.

Politics and Elections, Progressive Pictures, (black and white), 1969.

United States Elections - How We Vote, Bailey-Film Associates, (14 min., black and white or color, purchase), 1969.

When Losers Become Winners, NBC Educational, (14 min., black and white, purchase), 1970.

The True Story of an Election, Western Electric, (56 min., color, loan), 1970.

TRANSPARENCIES:

Government in a Free Society, Rand McNally, 1970.

Representative Government vs. Totalitarian Government, Visual Materials, 1968.

What Is A Citizen? What Are His Responsibilities?--And Rights? Visual Materials, 1968.

What A Citizen Can Do To Affect Legislation sual Materials, 1968.

The Voter Makes the Choice, Visual Materials, 1968.

CHARTS:

Government in a Free Society, Rand McNally, 1970.

GAMES:

Simulation Games: Democracy, Western Publishing, 1969.

AUDIO TAPE REELS:

The NAACP, History and Functions, Roy Wilkens, EMC Corporation, 1969.

Formation of Public Opinion and Racial Equality, Carl Rowan, EMC Corporation, 1969.

PHONODISCS 33:

Brown vs. Board of Education of Topeka, Enrichment Teaching Materials, 1969.

INDIVIDUAL STUDENT ACTIVITY

Every political party needs symbols, colors, and catchy slogans. Draw a symbol for a political party:

Write five slogans that you think would help your party win:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

INDIVIDUAL STUDENT ACTIVITY

The following groups lobby for certain types of laws. Find out what kind of legislation each group would be likely to favor:

The Sierra Club _____

_____

The National Association for the Advancement of Colored People _____

_____

National Rifle Association _____

_____

American Legion _____

_____

National Education Association _____

_____

Farmers National Grange _____

_____

American Federation of Labor _____

_____

National Council of Parent-Teacher Associations _____

_____

Unit 2

HOW OUR COUNTRY IS GOVERNED

This unit is designed to be presented in
Social Science or Political Science classes,
Grades 7, 8, or 9

Here are the contents of Unit 2 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

CONCEPT 15

INSTRUCTIONAL OBJECTIVES 15

CONTENT 15

- The President of the United States
- The Legislative Branch of the Government
- The Congressman and the Public
- The Judicial Branch of the Government
- The Citizen's Part in the Judicial System
- The Worker in the Government Service

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Unit 2

HOW OUR COUNTRY IS GOVERNED

CONCEPT

THE FEDERAL GOVERNMENT IS DESIGNED TO SERVE THE PEOPLE IT GOVERNS, AND PEOPLE MAKE THE GOVERNMENT FUNCTION

INSTRUCTIONAL OBJECTIVES

1. Ability to name the three branches of the federal government.
2. Ability to name the major functions of each of the three branches of the federal government.
3. Ability to list at least two ways by which the public can contribute to good federal government.
4. Ability to list at least six major job clusters in which people can work in government at the federal level.

CONTENT

The President of the United States.

Almost everyone would agree that the President of the United States has a very responsible and demanding job. The President has many who help, but he or she must be knowledgeable in such matters as foreign policy and trade, the activities of Congress, the financial and labor conditions of the nation, and the activities and attitudes of nations throughout the world. The President is the one person who must make many final decisions.

With modern day communications through the mass media (our magazines, newspapers, books, television, and radio) more is understood about the office of the President than ever before. Men and women, young and old, desire to hold that high office in the executive branch of government. Hundreds of thousands of dollars are spent each presidential election year to win or lose the high honor of taking the oath of office as President

of the United States of America and Commander-in-Chief of the Armed Forces.

The President is elected by the citizens (the voters) through an "electoral college" for a term of four years, and may serve a maximum of two elected terms. Presidents have come from many walks of life, such as lawyers, military men, businessmen, educators, and surveyors. Most of them have had experience in Congress.

The Legislative Branch of the Government.

The Legislative Branch of government consists of the House of Representatives and the Senate. The number of people serving in the House of Representatives from each state depends upon the population of that state. Members of the House, usually called "Congressmen" or "Congresswomen," serve an unlimited number of two-year terms as long as the district voters re-elect them. Two Senators from each state serve unlimited six-year terms, and are elected each term by the voters at large in their respective states.

Members of Congress have one major responsibility: to make laws for the benefit of their constituency. The benefits may extend beyond the borders of their elective districts and states, but since they are elected to serve the people, they are alert to the needs of those who voted them into office.

Men and women from many backgrounds serve in Congress. Most of them have served in some political office at the state or local level, and all of them have support from a political party. The ability to communicate effectively with people is important in being elected, and in performing effectively as a law maker.

A lot of the Congressman's time is spent in committee work. The effectiveness of his or her presence on a committee depends upon the length of time the member has served on it. Because of committee assignments and *tenure* (length of time in Congress), it is sometimes difficult to unseat an established member of Congress. If a Congressman becomes the chairman, or is a senior member of certain committees, he is in a position to be very valuable to the state he represents. He often may then have the power to influence placement of government contracts in his state. Therefore, there are certain advantages in establishing some degree of tenure in Congress. Many effective members of Congress have served many years, even until their late seventies. At the other extreme are "rookie" Representatives who are in their late twenties (twenty-five is the minimum age level).

Members of Congress can have backgrounds as businessmen, lawyers, accountants, educators, farmers, ranchers, housewives, and social

workers; almost any occupation qualifies a person as a member of Congress. A wide variety of backgrounds is valuable as input in making laws dealing with different situations. No one occupational background makes a better Representative of the people or law maker, although many are lawyers. The technicalities of writing the laws are taken care of by specialists. More important is the concern for the masses that a good member of Congress can generate in law making.

The Congressman and the Public.

One responsibility of a Congressman is to keep in touch with the voters at the district and state level. Congressmen return to their home states and districts regularly to talk with the voters and local government leaders, and thus keep aware of their needs. They are also interested in keeping their names before the voting public, because their jobs depend upon these people when it comes time to vote.

An equal responsibility is given to the voters and future voters to keep in touch with their Representatives in the House and Senate. Many times Representatives in Washington, D.C., feel far removed from the people in their districts because there is so little contact by letter, telegram, or telephone, but pressure or lobbying groups are constantly bringing their favorite issues before members of Congress. These issues must be weighed in terms of the effect they may have on the country, state, and Congressional District represented. Good Congressmen and Congresswomen take great pride in acknowledging the most seemingly unimportant request and letting the person or persons know what can be done about it.

The Judicial Branch of the Government.

The courts are part of the Judicial Branch of government. The federal courts are similar to the state courts.

There are lower courts, or courts having "original jurisdiction." Courts of Original Jurisdiction are those that take a legal case at its beginning.

Appellate courts are "Courts of Appeal." A case may be appealed to a higher court that can make one of three decisions:

- reverse the decision of the original court,
- stand by the decision of the original court,
- or send the case back for a retrial.

The U. S. Supreme Court stands as the last or final appeals court.

Very few cases end up in the Supreme Court, but once a case does, the decision is final. Cases reaching the Supreme Court usually deal with questions of federal or state constitutionality. The Constitution is the highest law and all lesser laws must be in agreement with it.

Federal judges, including Supreme Court justices, are appointed by the President. It is necessary that judges should not be guided by political considerations, therefore the appointment is for a long term, ending usually by retirement. Another method of keeping federal judges for a long time is to pay them good salaries.

Federal judges must have a broad background in law practice and principles. They must have a high degree of integrity and impartiality. They can be removed by impeachment.

The Citizen's Part in the Judicial System.

The citizen plays an important role in the judicial system. Besides learning and obeying the laws of the land, he or she may be called to serve on a jury. Jury service is a fundamental responsibility of every citizen, just as trial by jury is a fundamental right of all citizens accused of a crime. The jury system seldom fails; when it does, the failure is often caused by people not realizing the principles which have given them freedom, and their responsibilities in maintaining it.

The Worker in the Government Service.

Public careers with the federal government are numerous; this is apparent, since the government is the largest single employer in the country. Salaries, in most cases, compare favorably with private industry, but some government jobs pay less than their private counterparts. A public employee's career is usually more stable, and allows the employee the opportunity to move or transfer to different parts of the country, and perhaps, to some overseas assignments. The employment qualifications are about the same for a federal employee as they are for private business, although some assignments require special qualifications.

There is now a trend to be more competitive by improving employee salaries and other benefits in the federal service. There is as much a need for high quality work to be accomplished in government as there is in private business. Because of the size of the federal government, there is ample opportunity to advance if a person has the ability, and is willing to put forth the effort.

It is impractical to list the thousands of positions available through the civil service of the government. All new job openings must be advertised, and there are listings available from federal agencies showing the kinds of jobs in which people work.

Governmental jobs are sometimes filled by the political appointment of influential and talented party supporters. The appointments are made by the President or other elected officials.

The pay for an appointed position is good, but the appointee can expect to leave when the President leaves office. In some cases appointees are carried over into another Presidential term, even if the suceeding President is not of the same political party. Generally the appointees are selected from private business and industry because of their political expertise, as well as their loyalty to the political party.

Whatever the job may be in the federal government (elective, appointive, or career person), there will be opportunities to challenge almost any career desired. Almost all federal jobs are service oriented. This type of work brings the satisfaction of working with and for other people, and at the same time demands the ability to communicate and relate with other people. This public relations ability must always go with the basic skills and knowledge necessary to perform the work assignments.

TEACHER MANAGEMENT ACTIVITIES

- Have students discover the following about past Presidents of the United States (you may want to limit the Presidents to the last five or six):

  Occupational training,
  Amount of education,
  Party affiliation,
  Years in office,
  Prior political offices held,
  Age at inauguration.

- Assign students to find the names of the U.S. Senators and Representatives from their state, and the Representatives living in their districts.

- Have students seek out the names of federal offices and buildings located in their county, city, or state. Name at least twelve occupations relating to the named offices, buildings, etc.

- Have students determine for each member of the U.S. Supreme Court, the following:

Name and age,
President making his appointment,
Native of which state,
Years in office.

- Have students clip from newspapers or news-magazine, articles dealing with federal solutions or a need to solve a particular problem. Then determine:

  What branch of government was represented?
  Was it handled or should it be handled locally, regionally, or nationally?
  What might have been done to prevent the problem?

- Through the want-ads of a local big city newspaper, select a dozen federal jobs being advertised. For each job indicate the following information:

  Qualifications,
  Location of work,
  Salary range.

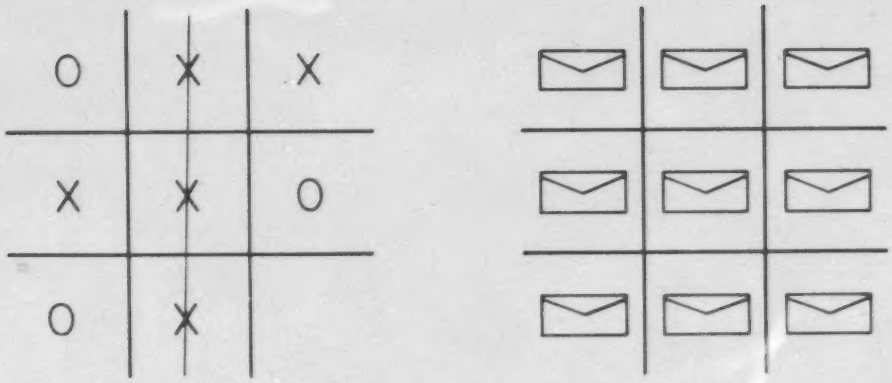
- Play the game of "CLUE." Under "Student Activities" the students are developing a series of clues for names and statements dealing with the lesson. Collect these clues and use them in developing the game of "CLUE":

  Divide the class into teams, allowing about five members to a team. Appoint a captain who sits behind the team members. Prepare about fifteen sets of clues. As the teacher announces that the game is to begin, the first team confers to decide how many clues to ask for since the more clues they have, the fewer points they get; that is, 1 clue = 4 points, 2 clues = 3 points, 3 clues = 2 points, and 4 clues = 1 point. The team has fifteen seconds to respond. The number of clues is written on the board by the teacher, who gives the clues.

  A team member who thinks he has the answer raises his hand, and is called on by the captain to respond. If the answer is correct, the score is indicated on the board. If incorrect, the same clue or others to the same answer go to the next team. This continues until a correct answer is given, finally by the teacher if necessary. A new set of clues is offered then to the next team in line.

  The team with the most points at the end of the period wins.

- Play the game of "Tic Tack Toe": Tack nine envelopes on a board as shown in the figure on page 21. Within each



envelope place three to five questions or statements concerning the lesson, each on separate slips of paper. Place more difficult questions and statements in the center and corner envelopes.

Divide the class into two teams, "X" and "O". The first student in team X takes a slip from any envelope and answers the question or discusses the statement before the class. The teacher or a panel of experts decides if the response is correct, and then, if the response is correct, places an X in the same location on Figure A as the envelope came from in Figure B. If the response is judged wrong, and O goes in the location, and the O team gets the next turn. Three X's or O's in a row win the game. The O team, win or lose, gets the first turn on the next game. Each team then alternates until the end of the game.

A partial list of possible questions and statements follows (answers in parenthesis):

1. How long can the President of the United States remain in office? (Two elected terms or eight years, plus any years replacing a President who has died or is otherwise not serving.)

2. How many senators are elected from each state? (2)

3. In what branch of government are the President's cabinet members? (Executive)

4. Who are the two Senators representing your state? (?)

5. Who is the Representative from your voting district? (?)

6. Name the three branches of government. (Executive, Legislative, Judicial)

7. Which branch of government do the armed forces (such as the Air Force) come under? (Executive)

8. How many Justices are there in the Supreme Court? (9)

9. Name three appointed positions of the federal government. (Justices of the Supreme Court, cabinet members, federal judges)

10. Name two primary responsibilities of a Congressman or Congresswoman. (Sit on committees, make laws, represent constituents)

11. What is the length of term of office for a Senator? (6 years)

12. What is the length of term of office for a Representative? (2 years)

13. What determines how many Representatives come from any given state? (Population as determined by the U. S. Census)

14. Why is it wise to have three separate branches of government? (Separation of powers, placing checks and balances on power)

15. What is the limit on the number of terms a Senator or Representative may seek office? (There is no limit)

16. A Senator must be at least (30) years old and a Representative (25) years old to be elected.

17. What is "franking privilege?" (Free use of first-class mail for Congressmen)

18. What is the purpose of the Supreme Court of the United States? (Final appeals court of the land, decision is final, last word in constitutional law)

19. What is the purpose of the federal district courts? (Try criminal cases relating to violation of federal laws)

20. Is a district federal judge appointed by the President? (Yes)

RESOURCES

BOOKS

Our American Government Today, Second Edition, Prentice-Hall, 1969.

Our Democracy at Work, Second Edition, Prentice-Hall, 1969.

Government by the People, Steck - Vaughn, 1970.

The National Executive Branch: An Introduction, Macmillan, 1970.

The White House and The Presidency, Charles E. Merrill, 1969.

The Cabinet of the President of the United States, Franklin Watts, 1969.

The Capitol and Our Lawmakers, Charles E. Merrill, 1969.

Congress: An Introduction, Rand McNally, 1969.

Congress: Power and Purpose on Capitol Hill, Allyn and Bacon, 1969.

The Congressman, Doubleday, 1969.

FILMSTRIPS:

Democracy in Action (Series 9), Universal Education and Visual Arts, (color, sound, purchase), 1969.

The Federal System, Parts One and Two, McGraw-Hill, (black and white, purchase), 1969.

Our Federal Government, CENCO, (color, purchase), 1969.

Our Federal Government (Series 6), Filmstrip House, (color, purchase), 1970.

Our National Government (Series 8), Society for Visual Education, (color, purchase), 1969.

How It Developed (Series 4), Society for Visual Education (color, purchase), 1969.

How It Functions (Series 4), Society for Visual Education, (color, purchase), 1969.

The President, Encyclopedia Britannica, (color, purchase), 1969.

Our President, McGraw-Hill, (color, purchase), 1969.

The Cabinet, Eye Gate House, (sound, purchase), 1969.

Executive Departments and Agencies, Encyclopedia Britannica, (color, purchase), 1969.

Federal Departments and Agencies, Universal Education and Visual Arts, (color, sound, purchase), 1969.

The Congress of the United States, Visual Education, (black and white, purchase), 1969.

The Congress of the United States, Universal Education and Visual Arts, (color, sound, purchase), 1969.

Congress of the United States, Society for Visual Education, (color, purchase), 1969.

The Congress, Encyclopedia Britannica, (color, purchase), 1969.

Congress - The Legislative Branch, Eye Gate House, (sound, purchase), 1970.

Congress and Its Powers, Eye Gate House, (sound, purchase), 1970.

Congress: Organization and Procedure, McGraw-Hill, (black and white, purchase), 1969.

The Senate, Filmstrip House, (color, purchase), 1970.

A Day in the Life of a Senator, Visual Education, (black and white, purchase), 1969.

The House of Representatives, Filmstrip House, (color, purchase), 1970.

The Home of Congress and Court, Imperial Films, (color, sound, purchase), 1970.

Executive Nerve Center - The Home of Congress and Court, Educational Activities, (color, sound, purchase), 1970.

Federal Judiciary, Society for Visual Education, (color, purchase), 1969.

The Federal Courts, Encyclopedia Britannica, (color, purchase), 1969.

FILMS:

Federal Government: The Plan of Organization, Coronet Films, (14 min., black and white, purchase), 1970.

The Making of a President, Films Incorporated, (82 min., black and white, purchase), 1969.

Mr. Secretary, Indiana University A-V Center, (29 min., black and white, purchase), 1970.

The Congress (Revised Edition), Encyclopedia Britannica, (20 min., black and white, purchase), 1969.

Legislative Process, Indiana University A-V Center, (28 min., black and white or color, purchase), 1970.

A Day in Congress, Institutional Cinema, (20 min., black and white, purchase), 1969.

The Supreme Court, Visual Education, (black and white, purchase), 1969.

Storm Over the Supreme Court, B'nai Brith, (50 min., black and white, purchase), 1969.

Profiles in Courage - Chief Justice John Marshall, I Q Films, (50 min., purchase), 1969.

TRANSPARENCIES:

U. S. Government and How It Works, AEVAC, 1970.

Presidential Administration and Political Parties, Western Publishing, 1969.

CHARTS:

Leadership: Our Executives, Denoyer-Geppert, 1969.

How Our President Serves Us, George A. Pflaum, 1970.

How a Bill Goes Through Congress, George A. Pflaum, 1970.

Our Federal Courts, George A. Pflaum, 1970.

INDIVIDUAL STUDENT ACTIVITY

You are to help construct a game of CLUE for the class. For each statement or name you are to write four clues, each one increasingly more revealing, thus making the answer easier as each clue is given. The instructor has the game rules and will use the best clues for the game at a later time.

An illustration is given below of how to write the clues. After studying the example, begin writing four clues for each statement or name given. The instructor will want to use your originals in the game.

President of U.S.	U.S. Senator	Washington D.C.
1. Elected official of U.S.	1. _____	1. _____
2. Serves a four year term	_____	_____
3. Commander-in-Chief	2. _____	2. _____
4. Lives in White House	_____	_____
	3. _____	3. _____
	_____	_____
	4. _____	4. _____
	_____	_____
_____	_____	_____
1. _____	1. _____	1. _____
_____	_____	_____
2. _____	2. _____	2. _____
_____	_____	_____
3. _____	3. _____	3. _____
_____	_____	_____
4. _____	4. _____	4. _____

INDIVIDUAL STUDENT ACTIVITY

Under each letter of the word "PUBLIC," write a word that relates to the federal government. It may be the last name of a Congressman, or the President, or his cabinet; or the name of a branch, bureau, or division of government. The first word under each letter is given as an illustration. Write as many words as you can in ten minutes. Other key words may be used.

P	U	B	L	I	C
Public	Udall	Banking	Laws	Interior	Currency

INDIVIDUAL STUDENT ACTIVITY

The federal government affects many parts of our daily life. Tell how the federal government affects your:

Clothing _____

_____

House _____

_____

Toys _____

_____

School _____

_____

Car _____

_____

Air _____

_____

Water _____

_____

Food _____

_____

Air travel _____

_____

Highway trips _____

_____

Train trips _____

_____

Recreation _____

_____

Unit 3

HOW THE STATE IS GOVERNED

This unit is designed to be presented in
Social Science or Political Science classes,
Grades 7, 8, or 9

Here are the contents of Unit 3 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

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INSTRUCTIONAL OBJECTIVES 31

CONTENT 31

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- The Legislative Branch of the State
- The Judicial Branch of the State
- The Functions of the State
- The Workers in the State Government

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Unit 3

HOW THE STATE IS GOVERNED

CONCEPT

THE STATE PROVIDES SERVICES AND PROTECTION FOR THE CITIZENS

INSTRUCTIONAL OBJECTIVES

1. Ability to list the three primary governing bodies of state government.
2. Ability to name the major elected and appointed officials of his/her state.
3. Ability to identify the means by which elected, appointed, and public employees are selected for their jobs.
4. Ability to list at least ten career jobs relating to state government.
5. Ability to list the roles of four elected state officials.

CONTENT

The governments of all the fifty states are similar, primarily because they were patterned after the original thirteen states. Each is governed by a chief executive, a legislature, and a court system. The states have certain rights and freedoms over which the federal government has no control. However, there are federal laws permitting the federal government to enter a state and exert certain control or force, and there are federal laws that take precedence over state laws.

The Executive Branch of the State.

The Governor is the Chief Executive and is elected by popular vote of the citizens of the state on a party ticket, after being nominated in a direct primary election. In most of the states, he serves a four-year term. The Governor receives a salary while in office, with an expense account, automobile, and an

official residence. Aspirants for the office of Governor have usually spent time in government work as an appointed or elected official of the state or of a large city in the state.

Generally, the Governor is the most powerful person in a state, although the powers vary between states. He has great influence in legislation, law inforcement, party politics, budgeting, and political appointments. Among other duties, the Governor attends ceremonial functions, uses mercy powers (such as pardons and commuting sentences), calls special sessions of the legislature, and commands the National Guard of his state.

Other top elected officials of state government include:

- Lieutenant Governor, whose role is similar to that of the Vice President of the United States;
- Attorney General, responsible for enforcing state law, and acting as legal counsel for the Governor, and legal officer for the state agencies;
- Secretary of State, who maintains the official records of the state executive departments;
- Auditor or Comptroller, who accounts for audits, and dispurses state funds and some federal money;
- Treasurer, the person responsible for the money of the state;
- Superintendent of Public Instruction, in charge of all public education in the state.

In some states the Auditors, Treasurers, or Superintendents are appointed, in order that more professionally trained people with longer tenure may add stability to the office.

The Legislative Branch of the State.

The state legislature generally has two houses, the lower house, or Assembly, and the Senate. State legislators are people from business and industry, such as lawyers, salesmen, teachers, housewives, doctors, farmers, skilled workers; in fact, just about any occupation one can think of. Usually, there are no restrictions to becoming a state legislator other than minimum age, residency in the state and district represented, use of the English language and, of course, being elected. The pay for serving a two or four year term in a state legislature is usually quite small.

A legislator is the representative of the people in his or her district only, although each legislator has to look at the interests of the state as a whole, even to national interests.

Legislators develop and work toward the passing or failure of laws, depending upon the influence the laws have on their constituents. There are also committee assignments that take up the bulk of their time while the legislature is in session.

There are variations in the organization of state governments. Some states have only one legislative body, called a Unicameral Legislature. State Constitutions vary somewhat between states; most of the Constitutions are very old and are in need of updating. The position of Lieutenant Governor does not exist in some states; and the Superintendent of Public Instruction is appointed by the Governor in some states, while in others the Superintendent is appointed by an elected State Board of Education. (Whatever differences exist should be carefully brought into the instruction of this unit in order that the students fully understand the organization of their state.)

The Judicial Branch of the State.

The vast majority of the people come in contact with state courts sometime during their lives. Each state has a Supreme Court and lesser courts. Lower courts may include (depending on the state) Justices of the Peace, Police courts, Traffic Courts, Small Claims Courts, and Juvenile Courts. General trial courts handle important civil or criminal cases; appeals from Justices of the Peace and police courts; and misdemeanor and felony cases. Judges in these courts might be appointed by the governor; however, they are usually elected, and have had legal training.

To permit appeals of cases heard in lower state courts, Appellate Courts are established by some states. Normally, a question of law must be involved to obtain the opinion of an Appellate Court. The court of last resort for most appeals from lower state courts is the State Supreme Court.

The Functions of the State.

The services performed by the state are expected roles of government. Most of these services are felt keenly by most residents. States provide at least these activities and programs for the regulation and care of the citizens:

- Transportation: safety; recreation, provisions for motor vehicles, highways, aeronautics, and waterways;
- Health and welfare: standards for food and drugs, domestic relations, and veterans' benefits;
- Public protection: civil defense, law enforcement, safety, prisons, courts, and police;

- Natural resources: maintenance of agriculture, forestry, parks, environment, conservation, and mines;

- Regulatory activities: with labor, banking, commerce, insurance, liquor, and public utilities;

- Education: buildings, graduation requirements, teacher certification, transportation, and curriculum;

- Planning and development: covering state's resources and urban developments, including the training and employment of the state's labor force.

The Workers in the State Government.

Many of the jobs held in state government are filled by appointment of the Governor, some of which require approval by the State Senate. Appointed jobs usually fall into such categories as department or commission administrators, or members of a board. The appointments sometimes come as a result of being involved with the governor's political party. Qualifications for the job do not necessarily take the greatest precedence; however, appointed people are usually competent leaders and administrators. In many cases they are businessmen who have been loyal supporters of the party.

State employees who are neither elected nor appointed fill the vast majority of government jobs at the state level. Civil service (that is, people hired and promoted through a merit system) is slowly growing in the states, but some state jobs are somewhat underpaid when compared to similar jobs in industry or business.

A great many professional people work for the state government. Doctors of medicine, lawyers, doctors of education, psychologists, counselors, engineers, and teachers are all involved in some way with the processes of maintaining the services and control of the state government.

Skilled technicians who operate heavy equipment, work in data processing, perform chemical tests, design roads, construct dams, care for wild animals and for parks, also contribute to the states' services. Secretaries, clerks, bookkeepers, and receptionists, working with the skilled or professional people previously mentioned, are just a few of the wide variety of people needed to staff the many departments of state government.

When state employees are chosen by the merit system, competency tests are given to determine the qualifications and the pay grade the person will receive if hired. In this way, the

required qualifications are not too different from those of business and industry.

Many people find state government work very satisfying, since they have possibly more security, less pressure from the profit motive, good vacations, and other fringe benefits. In some states, where the merit system does not exist, the spoils system is used to the detriment of state employees.

TEACHER MANAGEMENT ACTIVITIES

- Have students find names of people in their district who represent them on the state legislature.
- Have students clip articles and pictures from current newspapers that describe state (not local) problems.
- Make a collage of headlines and pictures dealing with state functions.
- Students could interview local state elected officials and determine the following:

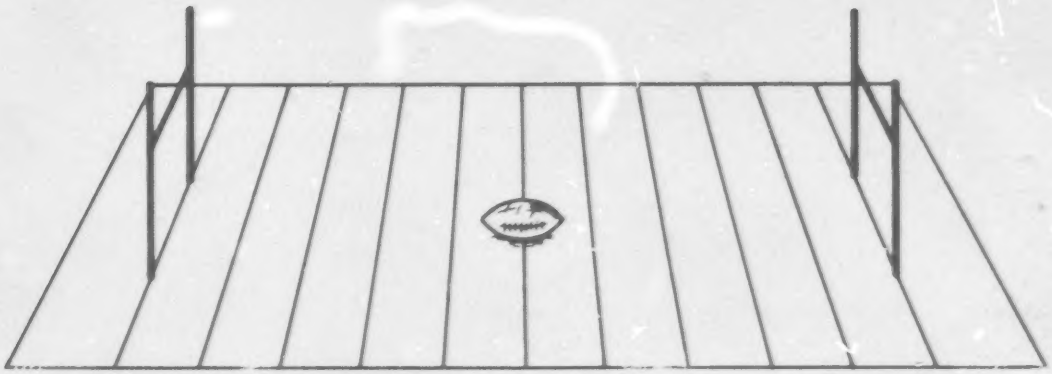
  How their campaigns were funded,
  How they spent the campaign funds,
  How they determined their platforms.

- Students should write legislators about an important issue that involves their state.
- Divide the class into two state political parties and become involved in the following activities:

  Hold district meetings;
  Determine platforms;
  Select candidates (limit to four or five positions);
  Determine campaign strategies;
  Write and design radio, TV, newspaper, billboard, and brochures (or handbills) to publicize the candidates;
  Write campaign speeches and deliver them before the class;
  Conduct a TV debate of issues;
  Hold election;
  Elected class "governor" should make appropriate political appointments.

- Political Football

  Draw a football field on the chalkboard as illustrated on page 36. Leave about five inches between "ten yard lines." Cut a football out of paper and place masking tape on the back so it will stick to the chalkboard (the board must be free of chalk dust).



A list of five, ten, and twenty-five yard questions is given below. The longer the distance, the harder the question. The ball is placed on the fifty-yard line. Each team member takes turn answering questions, selecting five, ten, or twenty-five yard questions. If a team member misses a question, the team loses the ball and the question goes to the opposing team. If the team answers the question correctly, the ball is moved toward the proper goal line the number of yards identified by the question listing. Then the other team selects a question, each member in turn answering. Score six points for each touchdown. A ten-yard penalty is assessed for speaking out of turn or seeking and/or getting help from other team members.

Partial List of Questions.....

Five Yard Questions

1. What is the title of the chief executive officer in your state?

2. What is the name of your Governor?

3. Name one duty of the Fish and Game Department.

4. Name one duty of the Attorney General.

5. Name just two duties of the Governor.

6. Name one duty of the Secretary of State.

7. Name one duty of the Superintendent of Public Instruction.

8. How many years does your Governor serve for each term?

9. What is a political platform?

10. Who appoints people to government positions?

Ten Yard Questions

1. How many branches of state government does your state have?

2. Name the political party of your Governor.

3. Name one duty of the Board of Health.

4. Who succeeds the Governor if he leaves office before his term expires?

5. How many members in your state legislature?

6. How old must you be to vote in your state elections?

7. How old must a person be to be elected Governor in your state?

8. What is the background of a person usually appointed to a state government position?

Twenty-five Yard Questions

1. Name the titles of five elected officials of your state.

2. What is the purpose of two houses in the state legislature?

3. Who or what established the precedent from which your state's Constitution was formulated?

4. What are three requirements to be a Governor in your state?

5. Name six non-elective and non-appointive government jobs in your state.

RESOURCES

BOOKS:

Our American Government Today, Second Edition, Prentice-Hall, 1969.

Magruder's American Government, Allyn and Bacon, 1970.

State and Local Government, Rand McNally, 1969.

Our Democracy, Steck-Vaughn, (workbook), 1970.

Our Democracy at Work, Second Edition, Prentice-Hall, 1969.

To Be a Good American, Book 3: In Your State, Fearon Publishers, (workbook), 1970.

Your Life as a Citizen, New Edition, Grade 9, Ginn and Company, 1969.

FILMSTRIPS:

The Role of Government, Filmstrip House, (color, purchase), 1970.

State Government, Encyclopedia Britannica, (color, purchase), 1969.

State Government in Action (Parts 2), Harcourt Brace Jovanovich, (color, sound, purchase), 1970.

The Duties and Powers of a State Governor, Visual Education, (black and white, purchase), 1969.

FILMS:

Our State Government, Bailey-Film Associates, (12 min., black and white or color, purchase), 1969.

Legislative Process, Indiana University A-V Center, (28 min., black and white or color, purchase), 1970.

State Legislature, Academy Films, (22 min., black and white or color, purchase), 1969.

State Legislature in Action, Coronet Films, (22 min., black and white, purchase), 1969.

Speaker of the House: The Legislative Process, Journal Films, (21 min., black and white or color, purchase), 1970.

Labor of Love, Serina Press, (22 min., black and white, loan), 1970.

TRANSPARENCIES:

Government in a Free Society, (Parts 23), Rand McNally and Company, 1970.

INDIVIDUAL STUDENT ACTIVITY

Column "A" is a list of state Departments, Boards, or Commissions. Column "B" contains a list of typical services or tasks performed. Match the services to the Department by drawing lines between the two columns.

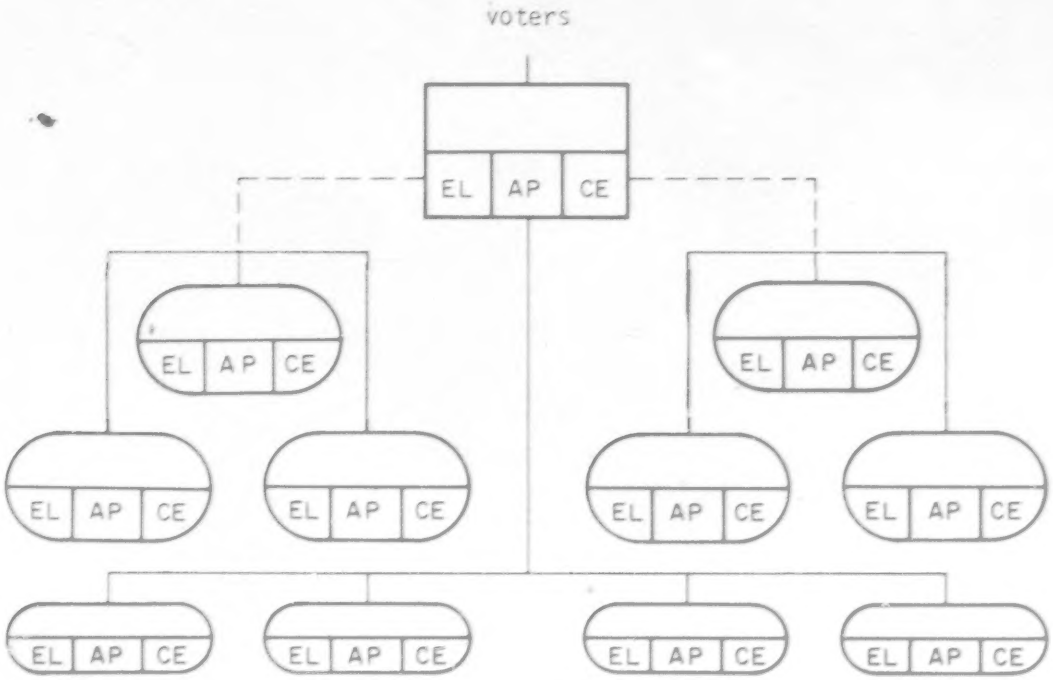
A Department, Board, or Commission	B Service or task
HEALTH	Repair roads
FISH & GAME	Certify teachers
HIGHWAY	License corporations
PUBLIC WELFARE	Inspect eating places
EDUCATION	Care for unemployed
SECRETARY OF STATE	Collect taxes
ATTORNEY GENERAL	Determine legality of legislation
TAX	Maintain state parks
	Wild game regulations
	Assess property
	Develop curriculum
	Build roads
	Interpret laws
	Plant fish

INDIVIDUAL STUDENT ACTIVITY

The organizational chart below shows general relationships of job positions in typical given groups of workers. (This chart is typical only; there are considerable variations in State government organizations.) Fill in the blocks, using the positions listed, for your state organization.

Governor	Lieutenant Governor
Attorney General	Secretary of State
Auditor	Treasurer
Superintendent of Public Instruction	Board of Health
Department of Highways	Department of Fish and Game
Department of Social Services	

After you have filled in the organizational chart with the appropriate names included above, check the box for each position indicating if it is elective (EL), appointive (AP), or civil employee (CE).



INDIVIDUAL STUDENT ACTIVITY

Find and circle the listed state activities or personnel, as they appear horizontally, vertically, at a 45° angle, backward, or forward:

A	T	T	O	R	N	E	Y	L	R	H	T	L	A	E	H
A	U	D	I	T	O	R	G	E	N	E	R	A	L	P	I
P	T	R	E	X	E	C	U	T	I	V	E		L	R	G
Z	M	T	Q	P	O	L	I	C	E	U	Y	O	I	R	H
F	E	P	T	U	A	C	J	M	E	T	O	V	B	O	W
I	D	O	N	B	L	R	E	R	U	S	A	E	R	T	A
S	U	P	E	R	I	N	T	E	N	D	E	N	T	A	Y
E	C	A	M	O	C	O	F	M	S	C	H	O	O	L	S
C	A	R	Y	A	O	D	A	I	E	V	Z	R	M	S	E
R	T	K	O	D	U	E	G	N	S	N	A	E	N	I	R
E	I	S	L	S	R	S	M	A	D	H	T	F	O	G	V
T	O	T	P	R	T	F	F	N	M	W	B	G	R	E	I
A	N	A	M	I	N	E	S	O	S	E	C	H	O	L	C
R	O	T	E	T	T	G	G	N	I	K	N	A	B	T	E
Y	F	E	S	Y	R	O	N	R	E	V	O	G	A	U	S
W	E	N	O	I	T	C	E	L	E	R	A	F	L	E	W

1. Attorney General
2. Auditor
3. Banking
4. Bill
5. Court
6. Dams
7. Department
8. Education
9. Election
10. Employment
11. Executive
12. Fish and Game
13. Governor
14. Health
15. Highways
16. Labor
17. Legislator
18. Mines
19. Parks
20. Police
21. Roads
22. Safety
23. Secretary of State
24. Services
25. Superintendent of Schools
26. Treasurer
27. Vote
28. Welfare

Key to Individual Student Activity on page 41:

A	T	T	O	R	N	E	Y	L	R	H	T	L	A	E	H
A	U	C	I	T	O	R	G	E	N	E	R	A	L	P	I
P	T	R	E	X	E	C	U	T	I	V	E		L	R	G
Z	M	T	Q	P	O	L	I	C	E	U	Y	O	I	R	H
F	E	P	T	U	A	C	J	M	E	T	O	V	B	O	W
I	D	O	N	B	L	R	E	R	U	S	A	E	R	T	A
S	U	P	E	R	I	N	T	E	N	D	E	N	T	A	Y
E	C	A	M	O	C	O	F	M	S	C	H	O	O	L	S
C	A	R	Y	A	O	D	A	I	E	V	Z	R	M	S	E
R	T	K	O	D	U	E	G	N	S	N	A	E	N	I	R
E	I	S	L	S	R	S	M	A	D	H	T	F	O	G	V
T	O	T	P	R	T	F	F	N	M	W	B	G	R	E	I
A	N	A	M	I	N	E	S	C	S	E	C	H	O	L	C
R	O	T	E	T	T	G	G	N	I	K	N	A	B	T	E
Y	F	E	S	Y	R	O	N	R	E	V	O	G	A	U	S
W	E	N	O	I	T	C	E	L	E	R	A	F	L	E	W

Unit 4

HOW LOCAL GOVERNMENTS ARE GOVERNED

This unit is designed to be presented in
Social Science and Political Science classes,
Grades 7, 8, or 9

Here are the contents of Unit 4 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

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Unit 4

HOW LOCAL GOVERNMENTS ARE GOVERNED

CONCEPT

MANY PEOPLE JOIN TOGETHER TO BRING CITY SERVICES TO ITS RESIDENTS

INSTRUCTIONAL OBJECTIVES

1. Ability to identify three major forms of city government.
2. Ability to describe the form of city government of the student's city (or nearby city).
3. Ability to name the major elected and appointed officials of a major city.
4. Ability to list the means by which elected, appointed, and public employees are selected for their jobs.
5. Ability to identify at least ten career jobs relating to city government.
6. Ability to list services offered by a large city government.

CONTENT

Local governments in the United States are largely based upon the organizational setup of the townships and parishes from which our early English settlers came. The sheriffs, justices of the peace, and coroners usually portrayed on television "westerns" were the officials of the early New England towns.

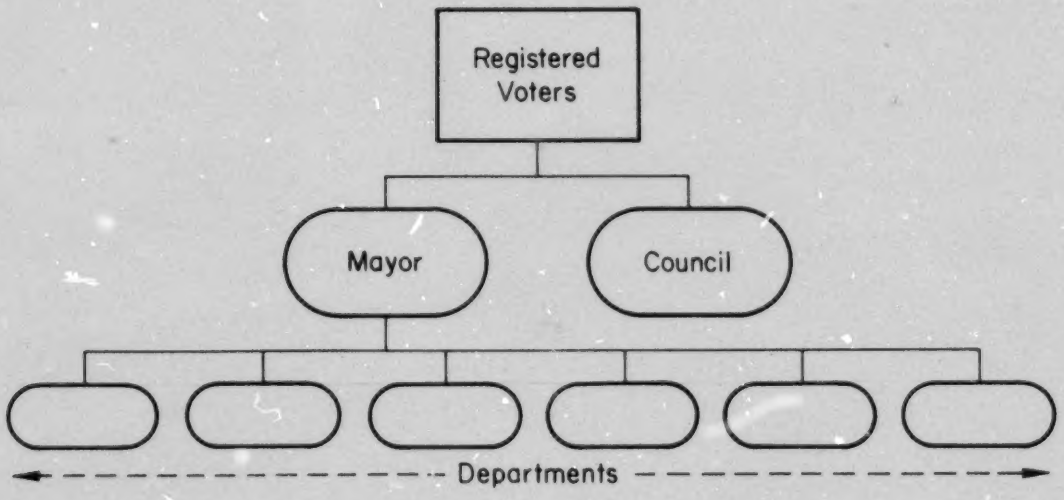
Town meetings were held regularly to decide policies and to correct problems of early communities. Self government at the local level has been (and still is) an important concept of American government. Nevertheless, local governments must look to the state for their powers, since they are chartered by the state government.

Local governments in the main consist of counties, which can be further divided into boroughs, villages, or special districts; with towns, townships, cities, and municipalities. Since seven out of ten residents in the United States live in or near cities at the present time, the major discussion of the unit will therefore deal with cities.

Forms of Local Government.

There are three major forms of local government. Each form has its own particular line of authority, as pointed out in the following charts and descriptions. In all cases you will see that all government positions, are creations of, and answer (if indirectly) to the voters.

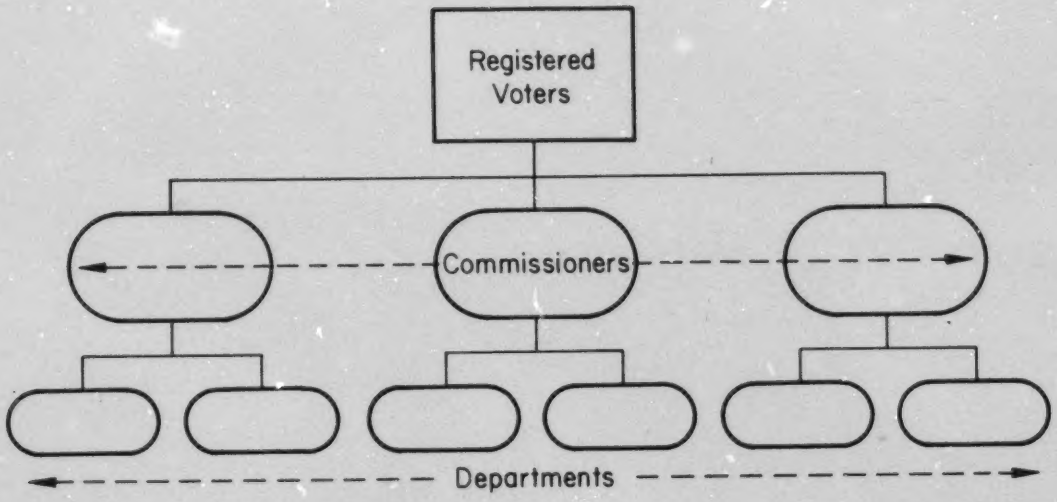
° Strong Mayor Council form of Government:



In this case, the Mayor heads the government and is usually elected to a two or four-year term. An elected city Council works with the Mayor, sometimes holding the same authority, and sometimes working in an advisory capacity to the Mayor. When the Mayor has more authority than the Council, it is called a strong Mayor Council.

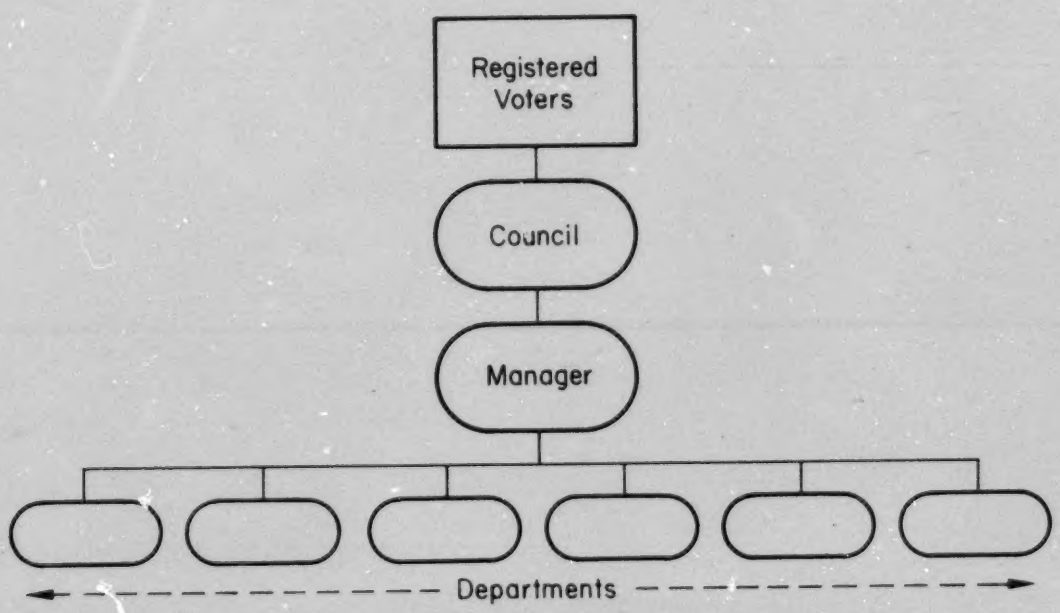
° Commission form of Local Government:

The Commission system consists of an uneven number, such as



three, five, or seven elected commissioners having equal power, each assigned to be responsible for one or more departments of city government. One member of the commission is designated mayor for special ceremonies. This system is more common at the county level, and has lost some popularity as a form of city government in recent years.

- Manager Council form of Local Government:



Here, the City Council is elected, and establishes the policies of the city. The city Manager is hired by the Council to be the chief administrator of the city. The Manager has power to appoint and dismiss Department Heads, but is directly responsible to the City Council. One of the Council members is designated as Mayor to preside at Council meetings and to take care of special ceremonies. The Manager is a professional administrator, usually trained specifically for the job of managing a city government.

The elected officials (Mayor, Council, or Commission) are primarily involved in managing the affairs of the city. Each has the obligation as an elected official to be the voice of the people he represents. The City Manager is an appointed position in city government. There are other appointed positions that are sometimes filled by friends of elected officials, although civil service is playing an increasingly important role in staffing city positions.

The increased quality of the worker would seem to be an important outcome of the civil service or merit system of recruitment, and promotion of city government workers. Appointed jobs of city government, therefore, are usually limited to Department Heads directly under a Commissioner or Councilperson.

Functions of the City.

As one looks at the services performed by a city, it is possible to understand the great variety of positions open to people desiring local government employment. Some of these services are:

° Public safety. Police and fire protection are increasingly important as a city grows. People hired in these Departments are usually thoroughly trained to perform effectively in their positions. When you need the help they bring you wouldn't have it any other way.

° Public works. Street maintenance, tunnels, sidewalks, drainage, opening new streets, repairing existing streets; these are all continuous and necessary parts of the city's responsibility. Snow removal is needed in the northern part of the nation. Landscaping and trimming of trees and shrubs along city streets is also important for beauty and safety.

° Public health. Air, water, and food pollution are serious problems in the cities. When people are congested into small areas, contagious diseases can be a major concern. Medical facilities and free clinics with medical and nursing care are

supplied by many cities. Air pollution is an increasingly important problem faced by our cities, and one that requires more workers to regulate and enforce pollution standards.

° Public sanitation. Proper disposal of sewage and garbage is critical for any city and for the health of the city's people. The purity of rivers and streams into which city waste may flow is another important responsibility of the city.

° Public transportation. Fuel shortages are just one indicator of the need for cities to provide more efficient means of transporting the people who live and work in the city. An affluent society produces many automobiles which congest city streets, adding to air pollution. Downtown businesses are striving to compete with suburban shopping centers. There needs to be ample parking and a free flow of traffic. The city must concern itself with these problems and bring about solutions.

° Housing, Urban Renewal, and City Planning. Building codes are enforced so that such things as proper sanitation and fire protection can be maintained. Public buildings must be built to provide for the needs of the elderly and handicapped. The city must be concerned with traffic, parking, and parks, so it is impossible to build a structure just anywhere. Rundown sections of the community must be rebuilt so that safety standards are maintained.

° Public recreation. Parks, swimming, bike trails, golf, tennis, music -- the list of recreation opportunities given the public in most large cities goes on and on. Crime and general public dissatisfaction increases as these services decrease.

Employment by the City.

Employment in city government is becoming more popular because of such changes in employment techniques as the merit system and civil service. Many employees are organized into employee associations that promote raises and other benefits, including a degree of job stability for its members.

The types of jobs are varied. Doctors, teachers, managers, and other professional people are employed. Skilled technicians work in medical laboratories and hospitals; they operate sophisticated equipment ranging from giant earth movers to electronic computer systems. Many students work during the summer caring for the parks, or doing work in offices, or on seasonal jobs. Numerous secretaries, bookkeepers, and clerks work in the city offices. Some entry-level jobs require a high-school diploma, while many require technical certificates or professional degrees.

Employment in other Local Governments.

Naming all of the types of workers in local government would be very time consuming. However, there are some you may have heard or read about recently. In county government, for instance, the Clerk, Recorder, Sheriff, Coroner, and Assessor are very important positions. Many counties have Boards of Supervisors. Also, there are special districts, such as water districts within counties (or in some cases crossing over county lines). A school teacher is a worker for another special district, the school district. Many people work for special districts, counties, towns, and cities. If you observe carefully, your relatives and neighbors are probably working in local government.

Counties and smaller city governments provide similar services as those described above for city government. The services vary according to size and the ability to pay, which is based upon the amount of tax coming into the local government's treasury. In many cases a small town will depend upon the county for fire and police protection, sanitation, water, and building codes. A small town cannot usually afford the luxury of a recreation department. The residents are forced to depend upon state, county, or nearby city recreational facilities. There are many towns and cities without services usually provided by a large city and taken for granted by its residents.

Many of the city's elected jobs are filled by people desiring an opportunity to move on to more responsible elected positions. However, most city workers feel a certain pride in being a part of their own local government and performing a satisfying and necessary service for their friends and neighbors.

TEACHER MANAGEMENT ACTIVITIES

- Through the use of the local newspaper, have students bring in items dealing with problems or activities dealing with the city operation. In using the articles, determine the person (or persons) who is likely to deal with the problem or activity.

- Have students list the elected officials of their city, town, or county.

- Have students clip news articles illustrating the activities of a city official, such as the Mayor, City Manager, Commissioner, or Councilman. Students should then explain the activity and relate the activity to the role of city government.

- Invite a local government official into the classroom for a discussion of city services and what students can do to be productive citizens. Have a list of discussion topics

for the speaker and questions from the students. These topics and questions should be prepared by the students prior to the speaker's appointment time.

- Have students watch for local government workers at their jobs. Have them write down the jobs and what the workers were doing. List all the jobs on the board and indicate:

  The department in which they work, and
  The probable qualifications for the job.

- Using a city map, indicate the downtown area, the city or county offices, fire stations, police stations, hospitals, schools, parks, and other local government facilities.

- Discuss in class the problems students see in their city. Then have each student (or group of students) write a letter to an appropriate city official explaining the problem, and what might be done to correct it.

RESOURCES

BOOKS:

Magruder's American Government, Allyn and Bacon, 1970.

The Urban Setting, Houghton-Mifflin, 1970.

Challenges in Our Changing Urban Society, Laidlaw Brothers, 1970.

State and Local Government, Rand McNally, 1969.

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Filmstrip #5, County Government, Part One: Elected Officials, Long Filmslide (color), 1969.

Local Government, Encyclopedia Britannica, (color, purchase), 1969.

Municipal Government, Encyclopedia Britannica, (color, purchase), 1969.

Learning About Our Town Government, Curriculum Materials Corporation, 1969.

Helping Our Town Government, Curriculum Materials Coporation, 1969.

FILMS:

County Government (Revised), Progressive Pictures, (22 min., black and white, purchase), 1969.

Community Governments: How They Function, Coronet Films, (14 min., black and white, purchase), 1970.

Our City Government, Bailey-Film Associates, (10 min., black and white or color, purchase), 1969.

The Year of the Mayors, NBC Educational, (53 min., black and white, purchase), 1970.

A View from City Hall, NBC Educational, (17 min., color, purchase), 1970.

MULTIMEDIA:

Old Cities, New Politics, Olcott Forward, 1970.

INDIVIDUAL STUDENT ACTIVITY

APPLICATION FOR LOCAL GOVERNMENT EMPLOYMENT

This is not an authentic application blank, because the purpose of filling in the blanks is to determine your knowledge of local government employment possibilities. You are to fill out three applications: one for an elective position, one for a civil-service high grade position, and one for a civil-service lower grade or entry position.

Directions: Fill in as many blanks as you can. Other than name, address, date, and phone, fill in the blanks based on your knowledge of what the qualifications and background ought to be, not on your own background and qualifications.

Date _____

_____
Your Name: Last, First, Middle

Phone _____

_____
Address: Street

_____
City State Zip

Position applying for: _____ Age _____

Expected Salary: $ _____ Hours per work week: _____

Highest Grade Completed: 8 9 10 11 12 13 14 15 16 State Degree, _____
(Circle Highest) (If Any)

Indicate school experience (classes) that will assist in performing your duties:

_____ _____ _____

_____ _____ _____

Indicate previous work experience that will assist in performing your duties:

_____ _____ _____

_____ _____ _____

Indicate previous political experience that will qualify you for the job you desire; _____

Please list two alternative jobs that have similar qualifications:

_____ _____

INDIVIDUAL STUDENT ACTIVITY

Unscramble the following words that relate to positions or Departments of a city government.

1. FISHERF _____
2. HHEALT _____
3. COCNERR _____
4. KLERC _____
5. SURETRERA _____
6. YOMAR _____
7. MISSMOCERION _____
8. TICY _____
9. GRAMANE _____
10. TASFEY _____
11. TONAERCIER _____
12. CITRAFF _____

Answer Key

1. Sheriff
2. Health
3. Coroner
4. Clerk
5. Treasurer
6. Mayor
7. Commissioner
8. City
9. Manager
10. Safety
11. Recreation
12. Traffic

Unit 5

WHAT IT TAKES TO BE A PUBLIC SERVICE WORKER

This unit is designed to be presented in
Social Science classes, Grades 7, 8, or 9

Here are the contents of Unit 5 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

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- Giving and Following Directions
- Relationships with Others
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- Importance of Appearance
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- The Future in Public Service

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Unit 5

WHAT IT TAKES TO BE A PUBLIC SERVICE WORKER

CONCEPT

PUBLIC SERVICE WORKERS NEED A COMBINATION OF SKILLS AND KNOWLEDGE TO DO THEIR JOBS

INSTRUCTIONAL OBJECTIVES

1. Ability to describe general qualifications for public-service workers.
2. Ability to identify at least two occupations at each professional, technical, and non-professional level.
3. Ability to compare specific qualifications of public-service workers at the professional, technical, and non-professional levels.
4. Ability to compare own present knowledge and skills with those needed for public-service workers at the professional, technical, and non-professional levels.
5. Ability to identify school subjects that will prepare for an entry-level public service occupation.

CONTENT

Many combinations of skills and knowledge are necessary for public-service work occupations. Depending upon the governmental level and upon the specific job, the combination of skills necessary may vary quite a bit. However, some qualifications, called *general qualifications*, are required of every public-service occupation. In addition, each job will have its own *specific qualifications* that are unique to that job.

Every public-service occupation needs people with some general skills, knowledge, and attitudes. Among these general qualifications are the ability to follow directions, the ability to work with other people, an attitude of willingness to learn, and a neat and clean appearance.

Giving and Following Directions.

Public-service workers must be able to follow directions given to them by their supervisors, and be able to give directions to those other public-service people who work for them. That means that directions must be given that are easily understood by those who are to follow them. Directions will be given in two ways: orally and written.

Because we all talk every day, we think that giving directions by word-of-mouth is a very easy thing to do. All one has to do is just "tell the other person what you want him to do." However, this is not always as easy as it sounds. For example: "Please hand me that book on the table" is a confusing direction to someone when there are two tables in the room with four or five books on each table. In order for a public-service worker to follow an oral directive, the instructions must be clear and specific. The above direction would have been easily understood if the speaker had requested the blue book on the right-hand table with the title, *Basic English for Jr. High School Students*. The person being given the direction would have known immediately what he was looking for (a blue book), the subject matter (Basic English), and the location (right-hand table).

In giving oral directions, we use other things besides words to convey our thoughts. We use loudness, tone of voice, and facial expression, to name but a few. These are not present when we write a sentence. The writer must then use punctuation to take the place of tone of voice or facial expression. A misplaced comma can completely change the meaning of a sentence, thus resulting in an unclear direction being given. For example: a misplaced comma makes the sentence, "In making coffee, cups of hot water are used," to read, "In making coffee cups of hot water, are used".

While a public-service worker must be able to give written and oral directions, the worker must also have a willingness to follow both written and oral directions. If he does not understand the directions being given, the worker must be willing to ask questions until the directions are understood. In this way, he will be able to follow the directions more easily and efficiently.

Relationship with Others.

Public-service workers come into contact with all kinds of people in all states of mind. The worker may have to answer questions from an angry taxpayer, or deal with people in need of help because they have lost their jobs, or provide information to the U. S. Congress, or to a County Board of Supervisors.

Being a public-service worker means getting along with people and maintaining constantly the attitude that the worker is there to serve the public. That means that he must be kind, considerate, helpful, and honest, both with the public and with his fellow workers.

Flexibility Required.

Government work is constantly changing. Change is often caused by new laws being written, or new and better ways being discovered for doing things. The public-service worker is constantly faced with new programs, changes in procedures, and different people with whom to work. He must be willing to learn, to ask questions, and to change direction. Yesterday's way of doing things may not meet the needs of today, so the government worker must be willing to change, grow, and learn in order to meet the challenges of today's world.

Importance of Appearance.

Government employees must constantly keep in mind that they represent the government to the public-at-large. It is very important, therefore, that they are always neat and clean in appearance.

In the last few years, clothing worn in offices and other places has become much more casual. Where once men wore highly starched shirts and dull colored business suits, they now wear permanent press shirts that do not require starch, and brightly colored sport jackets and slacks. Women who used to wear dresses and high heels now wear pantsuits and comfortable low-heeled shoes.

Even though clothing styles change, the need for a well-groomed appearance remains the same. Clothing should be clean and pressed, and should fit well and be comfortable.

Cleanliness of the body and hair is essential. Care should be taken that finger-nails are clean and neatly trimmed, and that the hair is combed. A well-groomed worker will be a credit to the agency for which the person works.

Specified Requirements for Public-Service Workers.

Generally, public-service occupations are classified according to the level of skill needed for a specific job. Occupations are classified as requiring professional skills and knowledge, technical skills and knowledge, or non-professional skills and knowledge.

Examples of occupations requiring professional skills include doctors, social workers, engineers, accountants, economists, chemists, foresters, and wildlife biologists. Public-service workers in the professions will ordinarily have completed a four-year college course, and may well have completed two or three years of graduate work.

Occupations requiring technical skills and knowledge will include such occupations as computer specialists, biological aides, pest control workers, air traffic control specialists, fire control technicians, dental assistants, and inhalation technicians. These technical workers will have usually completed a two-year community college course with specializations in the field of their interests. Many of these jobs may serve as a springboard to higher level responsibilities in management, general administration, and the sciences.

At the federal level, most technical positions are filled through two major community-college career-preparation programs. The junior federal assistant position is for liberal-arts graduates; the technical assistant is for graduates in the technical field (i.e. park technicians, etc.). A broad range of occupational activities is included in these programs.

Occupations of a non-professional nature usually require just a high-school diploma for an entry-level job. Sometimes they will require some post-high school training. Non-professional occupations include most clerical occupations, and such trades as welding, plumbing, and auto mechanics. They also include such fields as correctional officers, garbage collectors, community workers, and other paraprofessionals. Many of these occupations provide workers with an opportunity to gain valuable practical experience while they are in college preparing for technical or professional occupations.

Most governmental agencies encourage their public-service workers to prepare themselves for advancement by taking "on-the-job" training classes or college courses. Quite often, the agency will allow the worker time away from the job to take the class, and will even pay tuition and buy books for the worker. In some instances, therefore, it is possible for a person to enter government service right out of high school and, by hard-work and study, advance to an occupation requiring professional knowledge and skills.

The Future in Public Service.

Public-service workers during the 1970's and 1980's will be trying to solve problems arising from environmental crises, designing new transportation systems, exploring the ocean for new sources of food, and tackling complex problems of urban America. Others will forecast weather, protect our forests and

parks, handle relations between people, care for the sick and elderly, and teach the young.

Whatever their combination of skills and knowledge, public-service workers will have far-reaching impact on the health, welfare, economy, and security of the nation and their communities.

TEACHER MANAGEMENT ACTIVITIES

- Have class, as a group, develop a checklist evaluation form which will be used by class for evaluating directions that are given to them.

- Have class members give 5-minute speeches on topics of their own choosing or assigned by you. Class should give an informal critique using the above evaluation.

- Invite a beautician and a barber to speak on proper care of skin, hair, and nails.

- Divide class into groups of three. Each group should take a public-service occupational field, and compare the different qualifications required for different job classifications. Discuss their findings with the class. Each group could make a chart of their findings.

Example of occupational field: Medical Arts:

	Required Education	Required Experience	Specialized Skills
Professional Nurse			
Tech. License Vocational Nurse			
Non-Professional Nurse Aide			

- Divide class into groups of two or three, and role-play various situations in which public-service workers may find themselves. For example:

  Supervisor telling an employee his work habits are poor;

  Two co-workers discussing a new project. One is very pleased with the project and one is very negative;

  An interview in a tax-collection agency telling a taxpayer he is late paying his tax bill of $1,000, and will have to pay a 6% fine as a result.

Have class discuss the interpersonal relationships that developed during the situations.

- Have class discuss their experiences in finding out about people they did not like, and if and why their opinion changed about the persons as a result of getting to know about them.

RESOURCES

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Working For The U.S.A., Pamphlet #4, BRE-37, U.S. Civil Service Commission, 1972.

Dictionary of Occupational Titles, Volumes I and II, U. S. Government Printing Office.

Your First Job -- A Key To Your Future, BRE-10, U. S. Civil Service Commission, 1972.

How To Prepare Talks And Oral Reports, Simon and Schuster, 1969.

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Put Your Best Look Forward, Doubleday, 1969.

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Local Government, Encyclopedia Britannica, (color, purchase), 1969.

Supervisor And The Individual, International Film, (color, purchase), 1969.

FILMS:

Act of Honor, Serina Press (color, loan) 1970.

TRANSPARENCIES:

Government Serves The Citizen Around The Clock, Visual Materials, 1968.

Your Emotions Affect The Emotions Of Others, Creative Visuals, 1969.

KIT:

National Forum Developmental Guidance Series - Being Teen-Agers, American Guidance Service, 1969.

AUDIO TAPE REELS:

Recruiting For Jobs In Public Administrations, General Electronics Lab, 1969.

INDIVIDUAL STUDENT ACTIVITY

Get an announcement of a public-service job opening requiring just a high-school diploma. From the description of the job, pick out 3 or 4 activities, and determine the qualifications needed to do those activities. Decide what high-school subjects will give the help you need to meet the qualifications.

JOB ACTIVITY	QUALIFICATIONS NEEDED	SCHOOL SUBJECTS

INDIVIDUAL STUDENT ACTIVITY

Get three announcements of public-service job openings, one each at the professional, the technical, and the non-professional level. Find out the following information.

1. Job title _____

2. Description of the job: _____

_____

_____

3. Qualifications needed for each job:

   Educational _____

   Special skills _____

   Special licenses or certificates _____

   _____

   General qualifications _____

   _____

4. Are any weights given to any special areas of the applicant's skills? ___

   If yes, how much? _____

5. Are any weights given to any parts of the examination? _____

   If yes, what and how much? _____

   _____

6. Compare the qualifications for these jobs with your own knowledge and skills:

   _____

   _____

7. What subjects are you studying in school that would prepare you for these jobs?

   _____

INDIVIDUAL STUDENT ACTIVITIES

Collect newspaper or magazine pictures of people in various activities. Have other classmates discuss the clothing and grooming of the people by answering the following questions:

1. What kind of an impression does the appearance of the person make?

_____

_____

_____

_____

2. Is the clothing of the person appropriate to the activity the person is doing?

_____

_____

_____

_____

3. Would you want this person, dressed and groomed in this manner, to represent your school at a meeting with the Governor of the State?

_____

_____

_____

_____

INDIVIDUAL STUDENT ACTIVITY

Choose two people in the school whom you know and like pretty well. Describe what it is you like about each person. Describe things you don't like about them and why. Do not use the names of people you interview in this activity.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Choose two people in school that you don't like very well. Interview them and try to find out such information about them as follows:

- What do they do with their free time when they are not in school?
- What do they like about the person they most admire?
- What kinds of books and movies or television shows do they like?
- What kind of work do they think they would like to do when they are out of school and why?

Write a one-page description of each of the four people. As a result of writing and thinking about the four classmates, has your opinion of them changed in any way?

INDIVIDUAL STUDENT ACTIVITIES

Prepare a five-minute speech giving directions on one of the following topics:

- How to paint a fence,
- How to raise a vegetable garden,
- How to get from your school to the downtown area of your city or town,
- How to draw an abstract design,
- Any other topic assigned by your teacher.

Give this speech to your class. Do not use your hands in any way when giving your speech.

Unit 6

HOW PUBLIC SERVICE WORKERS ARE CHOSEN

This unit is designed to be presented in
Social Science classes, Grades 7, 8, or 9

Here are the contents of Unit 6 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

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- The Civil Service System
- G.S. Grade Levels
- Information About Available Openings for Jobs
- Examinations for Job Openings
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Unit 6

HOW PUBLIC SERVICE WORKERS ARE CHOSEN

CONCEPT

ANY PERSON MEETING THE QUALIFICATIONS FOR A PUBLIC SERVICE JOB HAS THE OPPORTUNITY TO BE CHOSEN

INSTRUCTIONAL OBJECTIVES

1. Ability to identify at least three governmental levels which employ public-service workers.
2. Ability to describe the steps followed to become a public-service worker.
3. Ability to list at least three places from which more information can be obtained about public-service work openings.
4. Ability to state the reason why any qualified person can be a public-service worker.

CONTENT

Government is the largest employer in the United States. In 1972, federal, state, and local government employed one out of every seven working persons in the country. Almost all of these workers come under civil-service merit systems. Under the merit system, persons are chosen to become public-service workers because they have the ability to do the job. This ability is demonstrated through competition with other persons.

Background.

It was not always this way. There was a time, in the history of the United States, when government jobs were given to people as a reward for supporting party candidates, or for making big money contributions to the winning party in an election. This practice of regarding public offices as plunder to be distributed to members of the victorious political party is known as the *spoils system*. This statement comes from a phrase by

William Learned Marcy, when he spoke of the corruption of the Andrew Jackson administration in which government employees who had not voted for Jackson were fired, to be replaced by those persons who had. The phrase Mr. Marcy used in describing this practice was, "To the victor belong the spoils of the enemy." The American public soon realized, however, that there was a need for public-service employees who were chosen because they were the best qualified persons to do the job, and not because they were members of the party then in office. As a result, the civil service merit system came into being.

The Civil Service System.

In the civil service system, all persons who meet the qualifications for a job are given consideration for appointment to that job without regard to race, color, creed, or national origin, but they must be able to pass written and/or oral tests which have been designed to test their knowledge about the job they want.

Different jobs require different types of tests to be given. Some jobs will require both a written test and an oral test. Other jobs will require only a written test which will examine the person's ability to learn how to do the job. Some public-service workers will be chosen by an oral test only. In an oral test they will be asked to describe the experience or training they have which they think qualifies them for the job for which they are applying.

Job openings in public-service occupations are announced in bulletins that are made available to any interested person. The bulletin will describe what the job is, what experience and education the applicant should have, whether a written test will be given, and how one applies for the job.

The U. S. Civil Service Commission announces and conducts examinations for public-service occupations for the federal government. The Federal Job Information Center will answer all questions about federal employment opportunities. The location of the local or nearest center is listed in your telephone book.

G.S. Grade Levels.

Professional and other "white collar" jobs with the federal government are classified under an 18-grade General Schedule (G.S.) system. Following is a chart showing what some of the qualifications are for each grade at the entry level. Salaries listed were current at time of publication. However, they are increased by Congressional action from time to time, roughly as the cost-of-living increases.

G.S. GRADE LEVELS (TYPICAL)

Grade	Qualifications
° GS-5 ($ 8500-11,047)	° College graduation, or ° 3 years of experience, including one year at the GS-4 level.
° GS-7 ($10,520-13,679)	° College graduation plus one year of graduate study, or College graduation with a superior academic record, or College graduation, plus one year experience at GS-5 level.
° GS-9 ($12,841-16,693)	° College graduation plus two years graduate study, or ° Meet the GS-7 requirements plus one year experience at GS-7 level.
° GS-11 ($15,481-20,125)	° College graduation plus 3 years graduate study, or ° The Doctor of Philosophy Degree, or an equivalent degree, or ° Meet the GS-9 requirements plus one year experience at the GS-9 level.
° GS-12 ($18,463-23,998)	° Meet the GS-11 requirements with one year experience at the GS-11 level.

Technical, skilled, and unskilled public service jobs have a similar grade classification system, and have qualifications appropriate to that grade. Many state and local civil service systems also have a grade system for work classification.

Information About Available Openings for Jobs.

State civil service or merit system boards announce and conduct examinations for public-service jobs at the state level. The state personnel boards will answer all questions about employment opportunities in the various states.

County civil service boards announce and conduct examinations for jobs in counties. The county personnel boards will usually answer questions about public-service jobs in other counties, especially if the job is a hard one to fill because the number of applicants is few, or the job requires very specialized skills.

Most cities and towns are also beginning to have civil service systems for public-service jobs. Usually the notice of a job vacancy will be posted at the city hall at the personnel office.

In addition to the Federal Job Information Center and state and local personnel boards, other places will have information about current openings for public-service jobs. These include the state employment office, the public library, and the school placement office.

Examinations for Job Openings.

In order to take the examination for a particular public-service job, a person must file an application. The application form will have space for information about the person's education, work experience, and other personal information, such as birth date and social-security number. The application must be filed by a certain closing date in order to be considered. Usually the closing date for filing is stated on the job announcement bulletin. There are usually always job openings, and an interested person may apply at any time.

If the civil service commission or board feels that the qualifications listed on the application meet the qualifications needed for the job, the applicant will be sent a notice to report at a special place and time to take the tests required for the job.

In order to be eligible for a public-service job, a person must pass the tests with a stated minimum score. Special credit may be given for military service, or service-connected disability. After the final grade of each person has been determined, the names of the applicants who passed the tests are placed on an eligibility list or register in grade order. The person with the highest grade will be first on the list, and the person with the lowest passing grade will be last on the list.

Appointments to Jobs.

Job offers are made from the list in the order the names appear on it. A person's chances of getting a public-service job depend upon his place on the list, and how fast various agencies fill jobs from the list. When a job is to be filled, the agency is given the names of the remaining three people who are highest on the list at that time. The person making the appointment will make a choice from among those three persons. The other two are put back on the list for future openings.

In addition to the ability to do the work, a public-service worker usually has to meet other requirements, such as age, citizenship, physical condition, and residency requirements.

Some federal public-service workers will be assigned to jobs that involve safeguarding the nation. In this case, these public-service workers must be separately and carefully

investigated to find out whether they are trustworthy, of good character, and loyal to the United States.

Benefits of Public-Service Jobs.

The salaries for public-service workers are usually about the same as for workers in private industry doing the same kind of work. Each job has a specified salary range. A new worker will usually begin work at the first salary level relevant to the job category. If the person performs the work in a competent manner, pay increases are made within the salary range until the top of the range is reached.

Public-service employees usually work a five-day week, Monday through Friday, from 8 in the morning until 5 at night. These hours may be modified for certain causes, such as staggering between different offices to even out traffic flows in and out. When they work more than the basic 40 hours, they may receive overtime pay, or be given time-off to compensate for the overtime.

Public-service workers are granted both vacation time and sick-leave time. The amount of time each worker is granted will depend upon the length of time that person has worked for the government. For example, someone who has worked for the government for only a year may be granted ten days vacation, while when he has been a public-service worker for twenty years, he may be granted fifteen days vacation per year.

There are many opportunities for advancement in the civil service system. All a worker has to do is prepare himself for advancement and take the promotional tests when they are announced. The procedure for selecting persons for promotion is the same as the procedure for selecting new workers. The job vacancy is announced, workers file applications, tests (both written and oral) are given, and the final promotion is made from the three persons highest on the eligibility list.

After many years of service as a government employee, a public-service worker may retire on a generous pension. This pension is usually 1/2 to 3/4 of what the base pay was for full-time work. So, if an employee earned $1000 per month, that person may be eligible for $500 to $750 per month pension, depending upon the length of service as a government employee.

Public-service workers have meaningful and important work to do for their fellow citizens. The civil service merit systems insure that all qualified persons have equal opportunities to be chosen for government service. It also insures that public-service jobs will be filled by persons who know how to do their work.

TEACHER MANAGEMENT ACTIVITIES

- Arrange field trip to a local civil service job information center - federal, state, county, or city.
- Assign class to go through the classified ad section of the newspaper and clip all announcement for civil service jobs.
- Arrange for a representative from one of the personnel boards to speak to the class about selection procedures for that board.
- Arrange the class into small groups; i.e., federal, state, county, city. Have each group research and discuss the selection procedures for their government level.
- Get copies of civil service sample examination books (such as those published by ARCO Publishing Company) and have class take a couple of tests.
- Divide the class into groups of four. Each group should choose a public-service job (such as Law Enforcement) and compare the different qualifications required by each level of government. Discuss their findings with the class. Each group could make a chart to display its findings.

  Example:

  Occupational Area: Law Enforcement

	Salary Range	Required Education	Required Experience	Special Skills
Federal F.B.I. Agent				
State Highway Patrol Person				
County Sheriff Deputy				
City Policeperson				

RESOURCES

BOOKS

Spoilsmen and Reformers, Rand McNally, 1969.

Working for the U.S.A., Pamphlet #4, BRE-37, U. S. Civil Service Commission, 1972.

Dictionary of Occupational Titles, Volumes I and II, U. S. Government Printing Office.

Your First Job--A Key to Your Future, BRE-10, U. S. Civil Service Commission, 1972.

Go Government, BRE-10, U. S. Civil Service Commission.

FILMSTRIPS:

Careers in Government Services, Vocational Education, (color, purchase), 1970.

New Career Opportunities, Progressive Pictures, (color, purchase) 1969.

Public Administration and Civil Service, McGraw-Hill, (black and white, purchase), 1969.

Civil Service Jobs, Popular Science, (color, purchase), 1969.

FILMS:

Your Job: Applying for It, Coronet Films, 1969.

Your Job: Fitting In, Coronet Films, (16 mm., purchase), 1969.

Act of Honor, Serina Press, (28 min., color, loan), 1970.

Labor of Love, Serina Press, (22 min., black and white, loan), 1970.

TRANSPARENCIES:

Civil Service Reform Movements Arise in the 1870's, Creative Visuals, 1968.

President Arthur Helps Further Civil Service Reforms, Creative Visuals, 1968.

INDIVIDUAL STUDENT ACTIVITY

Get an announcement of a public-service job opening. Find out the information below.

1. Level of government:

   ▱ Federal ▱ County

   ▱ State ▱ City or town

2. Occupation: _____

3. Filing date: _____

4. What is the description of the job: _____

   _____

   _____

   _____

   _____

5. What qualifications are needed:

   a. Educational _____

   b. Special skills _____

   _____

   c. Special licenses or certificates _____

   _____

6. How do you apply: _____

   _____

7. What kind of tests are given? _____

   _____

INDIVIDUAL STUDENT ACTIVITY

Get an announcement of a public-service worker job opening and an application form.

1. Fill out the application form as though you were applying for the job today.
2. List the areas where your present qualifications meet the qualifications requested:

_____

_____

_____

_____

3. List the areas where your present qualifications do not meet the qualifications requested:

_____

_____

_____

_____

4. What are some of the things you would need to do to get the qualifications you are lacking for this job?

_____

_____

_____

_____

INDIVIDUAL STUDENT ACTIVITY

Talk with someone you know who is a public-service worker. Find out the information below.

1. Occupation _____

2. For what level of government does this person work?

   ☐ Federal ☐ County

   ☐ State ☐ City or town

3. How did that person get chosen for the job?

   _____

   _____

4. What were the qualifications for the job?

   a. Education _____

   b. Age _____

   c. Experience _____

   _____

   d. Physical condition _____

   e. Any special skills _____

   _____

5. Has the person been promoted since becoming a public-service worker? ____

   If yes, what did the person have to do to be promoted? _____

   _____

6. What is the person's present pay grade (for example GS-5)? _____

Unit 7

FINANCING GOVERNMENT SERVICES

This unit is designed to be presented in Social Science and Mathematics classes, Grades 7, 8, or 9

Here are the contents of Unit 7 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

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Unit 7

FINANCING GOVERNMENT SERVICES

CONCEPT

SERVICES PROVIDED BY GOVERNMENT ARE FINANCED PRIMARILY BY THE PAYMENT OF TAXES

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the services provided by local, state, and federal government.
2. Ability to see the necessity for the payment of taxes.
3. Ability to describe the duties of workers involved in the collection and management of taxes.
4. Ability to see the necessity for planning for careers in high school.
5. Ability to relate the cost of education to future earnings.
6. Ability to understand that all careers benefit society.

CONTENT

People are often surprised when they think of the many services government provides. These services affect many parts of our daily life. The air we breathe is affected by government agencies which enforce air pollution laws. The water we drink is safe because of public servants who make sure of its purity.

Although there are many things individuals can do for themselves, there are many things that can be done more efficiently and economically if they are provided by the government. Although each person might be able to put out a fire at his home, it is certainly more efficient to have a fire department.

City Governmental Services.

City governments provide many services for the people in the

city. Water treatment plants make sure that we will have a fresh supply of pure drinking water. We depend on city workers to pick up trash regularly and to keep our streets clean so that our environment will be healthy and attractive. When we buy food at the grocery store, we are taking the word of public-service workers who have said that it was manufactured, packaged, marketed, and sold under sanitary conditions.

When trouble strikes, we depend on the fire and police departments to come to our rescue. Many city governments provide health services that their residents can depend on.

Although parents could educate their own children, it has been more practical to establish school systems that hire experts to teach what society feels should be taught. Cities also provide recreation facilities, libraries, art galleries, and museums.

City building and zoning codes assure all citizens that the buildings and homes they occupy are safe. Streets, provided by cities, are necessities in modern American life. There are many other services that the city provides for the safety and well-being of its residents.

County Governmental Services.

Of course, not everyone lives in a city. Many people, particularly those in rural areas, depend on the county for needed services. Counties, too, provide police, fire, health, and recreational services. Many children today are educated in schools operated by the county. Counties play a large role in conducting fair elections and maintaining a fair court system. Many important records, such as births, marriages, and deaths, are kept in county offices. We depend on counties to repair roads, bridges, and overpasses in our outlying areas.

State Governmental Services.

State governments can render many kinds of services that local and county governments cannot provide. Experts who work for the state can give advice to local government agencies. Local agencies depend on state financial assistance, particularly in education.

State agencies regulate private industries to protect the health and welfare of all its citizens. Food and meat are inspected, professionals must be licensed, and state hospitals for the physically ill, mentally ill, and retarded, must be maintained.

Most of the cost of welfare is borne by the state. Mothers with dependent children, the blind, and the disabled; they are

all eligible for state aid. Many states operate special schools or homes such as resident schools for the blind and the deaf.

The state provides leadership and direction to local school districts by providing experts who can help local districts solve their problems. Most states have college systems that will enable the young people of that state to receive college educations.

The citizens of a state depend on their state to build highways between cities, maintain a state police force, and to set safety rules and regulations for drivers in that state.

Since water and air pollution do not stop at city borders, problems like these are often state problems. State environmental agencies provide assistance to local districts in protecting and preserving the environment.

The people of a state depend on the state to look after their interests. State workers must check banks and savings and loans institutions to make sure the money placed there is secure. State legislators must pass laws to protect the consumer rights of everyone in that state. Places of historic importance and scenic beauty must be preserved so that everyone can enjoy them. The fish and wildlife of a state must be protected by the State Fish and Game Commission.

People who have broken the law must be tried in honest courts of law, and placed in correctional institutions where they can be rehabilitated. Juvenile offenders and orphans must be provided for, and ex-prisoners, addicts, and former mental patients must have help in readjusting to society. The state plays a major role in providing services that people need.

Federal Governmental Services.

There are some services that only the federal government can provide. Ships that enter American waters, the air lanes that cross our country, and the immigration and naturalization of citizens must all be handled by the federal government. The federal government operates a postal system so that all postal rates will be uniform. An army, navy, and air force must be maintained to defend our country. Trade between foreign governments and American citizens must be regulated. The federal government gives assistance and advice to state agencies in education, resource management, health, and social welfare. Americans depend on federal law enforcement agencies to combat crime that crosses state lines. Urban renewal; school lunch programs; and social security programs for the aged, disabled, and survivors of workers; these, too, are all federal programs.

Federal agencies and commissions must protect the well-being of all citizens by preventing monopolies, setting fair rates, and promoting our nation's commerce and industry. The residents of the United States must be protected from dangerous diseases that could spread throughout the nation. The welfare, working conditions, and safety of our work force must be up to proper standards, and those without jobs must be provided for until they are able to reenter the working world. Weights and standards must be uniform throughout the nation, and standards for using airwaves must be set. Americans would be in a difficult position if the federal government did not provide these services for us.

Financing City Governmental Services.

Federal, state, and local governments spend billions of dollars each year in providing these services. How do these governments pay for these services? Each American, by paying his share of taxes, makes these services possible. Each unit of government - state, local, or federal - must collect taxes to pay for its services. Without taxes, governments would be unable to provide the services they render.

The major source of revenue in most cities is the Real Property Tax. The amount of property tax that a citizen pays is directly related to the value of the real property he owns. Each taxpayer receives a property tax bill annually. Many cities also raise money by assessing a sales tax on certain items that are sold.

Public utilities may pay franchise taxes for the privilege of doing business in the community. Engineering fees may be charged for processing a subdivision map, permit fees may be collected for construction, and there may be filing fees for processing requests for a change in zoning laws. Court fines for law violations are another source of revenue.

Most cities receive a considerable amount of revenue from service charges. Residents may be charged for trash collection, special recreational programs, fingerprinting, use of facilities, copies of city records or maps, and similar services. Service charges are usually assessed when a part of the population receives some benefit from a service, while others receive no benefit at all. Special assessments may be levied in certain areas to pay costs of improvements, such as putting in sewers, lights, and water lines. Revenue collected by the state, such as motor vehicle, gas, liquor, and trailer fees, may be returned in part to cities, counties, or school districts.

In addition to being the city's main source of revenue, the

property tax is the principal source of the revenue of county governments and school districts as well.

Financing State Governmental Services.

The state, too, must collect monies for its services. Many states have state income taxes, which relate to the amount of money a citizen makes yearly. States may have *real property taxes*, which are levied against houses and buildings, or *personal property taxes*, which are levied against furniture, cars, etc.

States may also assess sales taxes, gas taxes, and license fees. Businesses and corporations may pay franchise taxes which allow them to operate in that state.

States may have an inheritance tax, which is levied against the amount of money a person inherits.

States receive financial assistance from the federal government called *grants-in-aid*. The federal government pays money to the states if it will be spent in a certain way, and if the states or cities will pay a small portion of the costs themselves. In recent years, the federal government has returned part of the money it has collected to the states without telling them how to spend it. This is called *revenue sharing*.

Financing Federal Governmental Services.

The federal government raises revenue by levying income taxes annually. Considerable income is also raised by taxing corporations, imported goods, estates, and gifts.

Citizens who buy certain items, such as cigarettes and liquor must pay an excise tax on them. There are other taxes that the federal government assesses as well as those listed here.

The federal government collects more than $150 billion in taxes every year. This money must be collected in an efficient manner.

Collection of Taxes.

The Internal Revenue Service of the Department of the Treasury, which is responsible for the collection of Federal taxes, has more than 13,000 employees who do professional accounting work. Internal Revenue agents make investigations to make sure everyone is paying his fair share of the nation's taxes. They examine and audit books to determine if the correct amounts of taxes have been paid. Special agents investigate cases where

an attempt has been made to defraud the government. Tax auditors contact taxpayers when a further explanation of a tax payment is necessary. Collection Revenue Officers collect delinquent taxes and seize property when essential.

The Internal Revenue Service and the Department of Justice employ hundreds of lawyers who interpret tax law, prepare cases, and try defendants who have violated the law in court. Estate tax attorneys examine estate and gift income tax returns to determine the value of the estates or gifts and the amount of taxes that are due.

Some Internal Revenue agents investigate other agents. They are called Internal Revenue Inspectors. By keeping a careful watch over all employees, the IRS seeks to eliminate extortion, fraud, bribery, embezzlement, and theft.

The states also hire many tax specialists. They examine income tax returns, ask for changed assessments if desirable, and make refunds when proper.

Auditors also work for the State Revenue Agencies. They make audits of individuals, business organizations, or state agencies to make sure the taxes paid are correct.

Tax specialists are college graduates who have usually majored in accounting, business administration, and law. However college graduates who have majored in political science, public administration, education, and liberal arts can also become Internal Revenue Agents.

Tax auditors require graduation from college with specialization in accounting. All estate attorneys and legal counsels must have graduated from law school and must be members of the Bar Association.

Alcohol and Tobacco Tax Inspectors in the Internal Revenue Service inspect distilleries, breweries, wineries, cigar and cigarette manufacturing plants, wholesale liquor dealers, manufacturers of foods or medicines, and laboratories doing scientific research. These inspectors analyze records and accounts to make sure that proper taxes have been paid, and that the taxpayers have complied with Federal laws and regulations.

Persons who have two years of college work can become accounting technicians, tax examiners, or revenue representatives. Those who have taken business, economics, accounting, and related subjects during their two years of college study can qualify as Internal Revenue Aides.

The IRS also employs computer programmer trainees with associate-of-arts degrees. However, four years of computer

science and data processing are desirable as supplemental education.

Accounting for Governmental Expenditures.

Since the federal government spends billions of dollars, it is necessary to guard against waste and inefficiency. The General Accounting Office is the agency which conducts audits of government corporations and agencies, and of private corporations which have contracts with the government. College graduates who have majored in business or related fields are employed by the General Accounting Office to examine financial dealings, so make sure that everyone has obeyed the law. These employees determine whether the government's money is being spent effectively, and disclose wasteful and unbusinesslike practices.

We depend on public-service employees to collect our nation's revenue, and to see that it is spent in a wise and efficient manner.

TEACHER MANAGEMENT ACTIVITIES

- Obtain a property tax bill and discuss how the money collected will be spent.
- Discuss the high school courses that are necessary if one wants to enter the taxation field.
- Ask students to make a list of all workers whose contributions affect their lives between the time they get up and the time they arrive at school.
- Ask students to state which of the above workers are most important, and point out finally that all workers are equally important.
- Ask students to tell what the results of a strike by each group of named workers would be.
- Arrange for Internal Revenue Agents to visit the class.
- Compare and contrast the duties and qualifications of workers for the Internal Revenue Service.
- Divide students into small groups and initiate discussions on the students' own qualifications for a career in taxation.
- Compare the different ways students spent their money on city services.
- Obtain a course selection guide from nearby schools and discuss the courses that are related to taxation careers.

RESOURCES

BOOKS:

The Federal Tax System, Tax Foundation, 1968.

Taxes and Government Spending, Behavior Research Laboratory, 1969.

Teaching Taxes Program, U.S. Internal Revenue Service, 1972.

The Internal Revenue Aide, U. S. Internal Revenue Service, 1969.

Revenue Agent, U. S. Internal Revenue Service, 1970.

Revenue Officer, U. S. Internal Revenue Service, 1970.

Internal Auditor, U. S. Internal Revenue Service, 1970.

The Tax Auditor, U. S. Internal Revenue Service, 1970.

FILMSTRIP:

How Government Helps the People, Curriculum Materials Corporation, (color, purchase), 1969.

How It Functions, (Series 4), Society for Visual Education, (color, purchase), 1969.

Business and Government, McGraw-Hill, (black and white, purchase), 1969.

Federal Finance, McGraw-Hill, (black and white, purchase), 1969.

Why We Pay Taxes, McGraw-Hill, (color, purchase), 1969.

Careers in Government Services, Vocational Education, (color, sound, purchase), 1970.

FILMS:

The Functions of a City, Progressive Pictures, (black and white, 11 min.), 1969.

Mission for Millions, Serina Press, (color, sound, loan), 1970.

Taxes: Their Source and Usage, Progressive Pictures, (11 min., black and white, purchase), 1969.

The New Girl, B'nai Brith, (31 min., black and white, free), 1969.

TRANSPARENCIES:

Financing Government Services, Visual Materials, 1968.

Government Serves the Citizen Around the Clock, Visual Materials, 1968.

Federal Government Spending, Tweedy Transparencies, 1969.

Fiscal Budget - Income and Expenses, Creative Visuals, 1968.

Federal Government Taxation, Tweedy Transparencies, 1969.

CHART:

Taxation - United States Income and Expenses, A. J. Nystrom, 1970.

AUDIO TAPE REEL:

Graubard, Seymour: Problems of Municipal Government, EMC Corporation, 1969.

Government Contracted Businesses, General Electronics Laboratory, 1969.

Your Future in the Internal Revenue Service, Harcourt Brace Jovanovich, 1969.

What You Should Know About Accounting As A Career, National Center for Audio Tapes, 1968.

Interview Accountant, Imperial International Learning, 1969.

INDIVIDUAL STUDENT ACTIVITY

There are many services which must be provided from taxes. If you had a tax dollar to spend, how would you spend it? For the city services listed below, tell how many cents of your dollar you would spend on that service. You must use the two figures that are already listed.

Police and courts ----------	$ _____
Public housing ----------	_____
Recreation and culture --------	_____
College ----------	_____
Transportation ----------	_____
Fire protection ----------	_____
Environment ----------	_____
Health ----------	_____
Education ----------	_____
Social services ----------	_____
Finances ----------	.01
Paying debts ----------	.08
	$ 1.00

INDIVIDUAL STUDENT ACTIVITY

Are the people of Whispering Pines doing some things illegally? Put a line under each thing Whispering Pines cannot legally do.

Whispering Pines is a new town in the United States. The residents of this city are people who are tired of the way other towns have been run, so they decided life in Whispering Pines would be different.

They decided that half of the town's police force would be female. Cars could not be driven over 20 miles an hour. Stop lights would be placed every three blocks. All streets would be one-way streets. The trash would be collected twice a week and every street had to have five trees.

The Town Council decided that the town's stamps would be purple, pink, and gold. Everyone thought blue would be a nice color for the town's new fire trucks.

As half of the young men were out of work, the town decided to hire some of them to work in recreation centers. Others were hired to keep the environment clean. Since one hundred young men still could not find jobs, Whispering Pines put them in the Whispering Pines Army, which would be ready to fight overseas in a moment's notice.

Whispering Pines had one big problem. The town's treasury had no money. Mr. Johnson, the Town Treasurer, was sent to the Country of Grenoble to borrow some money. When he returned, he told the council that he had signed a treaty with Grenoble and their money would arrive soon. However, the town would have to buy 1,000 pairs of shoes made in Grenoble.

When the money from Grenoble arrived, the citizens were alarmed to discover that Grenoble had sent them worthless shoes to buy. The citizens of Whispering Pines declared war on Grenoble and the army prepared to fight for the cause. Mr. Johnson was sent back to Grenoble and signed another treaty stating that better shoes would be sent to Whispering Pines.

The Town Council took Mr. Davis' suggestion and printed some money. The town of Live Oak was charged $10,000 for the use of the Snail River, because its mouth was in Whispering Pines. All products that entered and left the city were taxed by the Town Council. Everyone who operated a business in Whispering Pines had to pay for a business license. Mrs. Reeves, the owner of the TV station, ran commercials every seven minutes and gave the town half of the money she raised.

Whispering Pines became so wealthy that its citizens decided to buy the Country of Grenoble. The Whispering Pines Army was sent to govern the Country of Grenoble and the people of Whispering Pines lived happily ever after.

Answer Key to Individual Student Activity on Page 93

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INDIVIDUAL STUDENT ACTIVITY

People who work for the Bureau of the Budget help the President by preparing and analyzing budgets. Do you enjoy preparing budgets?

Bob Allen is thirteen years old. He gets an allowance of seven dollars a week. He must pay for his school lunches (average 70¢ a day) out of his allowance. He is in a Saturday bowling league which costs $1.50. He enjoys going to the movies once a week which generally costs him $1.00. His other interests are skating, miniature golf, basketball, and football games, which cost 50¢ each. Bob would like to pruchase a $29.95 camera, but must save the money out of his allowance if he wishes to buy it.

Prepare a two-week budget for Bob.

FIRST WEEK	SECOND WEEK

INDIVIDUAL STUDENT ACTIVITY

Internal Revenue Agents are college graduates who have usually taken courses in accounting, business administration, commerce, economics, and law. Anyone interested in becoming an Internal Revenue Agent should take courses in English, history, social science, mathematics, and the physical sciences in high school.

Get a list of the courses offered by the high school nearest you. Plan a selection of courses for a person who wishes to become an Internal Revenue Agent.

NINTH GRADE	TENTH GRADE

ELEVENTH GRADE	TWELFTH GRADE

INDIVIDUAL STUDENT ACTIVITY

Do you enjoy making sure that other people's work is correct? Examiners and investigators check many business statements to make sure they are accurate.

Here is the final statement for the school carnival. Is it correct? If it is not, make the necessary corrections.

Tickets Sold	Event	Money Taken In	Expenses	
156 @ $ .15 ea.	Fish Pond	$ 23.50	Fish Pond	$ 8.79
173 @ .15 ea.	Ring Toss	25.95	Ring Toss	10.95
194 @ .15 ea.	Milk Bottle Toss	29.10	Milk Bottle Toss	5.76
205 @ .15 ea.	Shooting Gallery	30.55	Shooting Gallery	9.70
125 @ .15 ea.	Fortune Teller	18.75	Fortune Teller	3.45
75 @ .50 ea.	Portrait Studio	37.50	Portrait Studio	15.75
60 @ 1.00 ea.	Dunk-A-Man	60.00	Dunk-A-Man	5.60
500 @ .25 ea.	Cake Walk	125.00	*Cake Walk	0.00
675 @ .20 ea.	Chances on the 10-speed bike	135.00	*10-speed bike chance	0.00
			*Fun Hats	0.00
150 @ .75 ea.	Fun Hats	112.50	Printing of Tickets	25.00
	Total	$597.75	Total	$84.00
	Candy & Cookie Sale	$ 50.94	Balloons	$10.50
	Balloon Sale	45.00	Hot Dogs, Buns, etc.	50.70
	White Elephant	50.28	Drinks	15.00
	Hot Dogs 504 @ 40¢	201.64	Pop Corn	20.00
			Total	$96.20
	Cold Drinks 800 @ 20¢	160.00		
	Pop Corn 400 bags @ 25¢	100.00		
		$607.86		

$ 597.75
+ 607.86

Total Income $1,204.61

$ 84.00
+96.20

Total Expenses $180.20

Total Income $1,204.61
Total Expenses 180.20

TOTAL $1,024.41

*These things were donated:

Cakes
Bicycle
Fun Hats

INDIVIDUAL STUDENT ACTIVITY

John Evans has a job as a clerk which pays $4,800 a year. If John goes to college for two years, he can become an accounting technician at $6,000 a year. If he received a college degree he could become an Internal Revenue Agent with a starting salary of $8,000 a year. Look at the earnings for each job below.

	Clerk	Accounting Technician	Internal Revenue Agent
Year 1	4,800	In college	In college
2	4,800	In college	In college
3	5,000	6,000	In college
4	5,000	6,000	In college
5	5,000	6,000	8,000
6	5,200	6,500	9,000
7	5,200	6,500	12,000
8	5,200	7,000	14,000
9	5,400	7,500	15,000
10	5,400	7,500	16,000
11	5,400	8,000	16,000
12	5,600	8,500	16,000
13	5,600	9,000	17,000
14	5,600	9,500	17,000
15	5,600	10,000	18,000
16	5,800	10,000	18,000
17	5,800	10,000	19,000
18	5,800	10,000	20,000
19	6,000	10,000	20,000
20	6,000	10,000	20,000

How much has each job paid in 5, 10, 15, and 20 years?

	5 Years	10 Years	15 Years	20 Years
Clerk				
Accounting Technician				
Internal Revenue Agent				

Unit 8

THE GOVERNMENT LENDS A HAND

This unit is designed to be presented in
Social Science classes, Grades 7, 8, or 9

Here are the contents of Unit 8 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

CONCEPT 101

INSTRUCTIONAL OBJECTIVES 101

CONTENT 101

- People Who Need Help
- Influence of Environment on Need
- Governmental Actions to Help
- Social Security
- Unemployment Insurance
- Medicare and Medicaid
- War on Poverty
- Social-Service Workers

TEACHER MANAGEMENT ACTIVITIES 105

RESOURCES 106

- Books
- Filmstrips
- Films
- Audio Tape Reels

INDIVIDUAL STUDENT ACTIVITIES 108-111

Unit 8

THE GOVERNMENT LENDS A HAND

CONCEPT

PUBLIC SERVANTS PROVIDE SERVICES FOR THE HEALTH AND WELFARE OF ALL CITIZENS

INSTRUCTIONAL OBJECTIVES

1. Ability to list five problems handled by social agencies.
2. Ability to name the major job families in social services.
3. Ability to identify and describe several federally-supported antipoverty programs.
4. Ability to compare and contrast the duties of workers in social services.
5. Ability to match own interests and abilities to skills and activities in social services.
6. Ability to recognize that many conditions can affect life-style.
7. Ability to recognize that values relate to life styles.

CONTENT

America has been called one of the richest lands in the world. The average American citizen leads a life that is filled with material things and luxuries that the citizens of most other lands can only dream about; Americans of today have the highest standard of living in the world. Our streets are filled with people who are engaged in producing goods, rendering services, and buying merchandise. Yet, in the midst of all this wealth, large segments of our population live in poverty and despair, and must have help in order to function in today's world.

People Who Need Help.

Who are these people who need help?

- The thousands of men and women who are unable to find a job or whose income is so low they are unable to care for their families adequately;
- those who are sick or too old to be employed;
- victims of racial, religious, and sexual discrimination;
- people with emotional illness, physical handicaps, or mental retardation;
- those who have prison backgrounds or histories of drug abuse.

Many individuals may have several of these problems. The family that is homeless may be headed by a male who can't find a job because he lacks a high school diploma. In the past, there was much unskilled work available for persons with little education, but now greater skills and more education are required for many jobs. The father who cannot find work becomes discouraged and depressed, causing his marriage to suffer. When the stability of the home is threatened, children sometimes begin to have school problems, such as truancy or academic failure.

Influence of Environment on Need.

These problems are apt to be aggravated if the family lives in a slum area. Although everyone who needs assistance does not live in a slum, many do because these are the only areas they can afford.

Slum housing is often run-down and overcrowded. In addition to being overcrowded, slum housing may also have unhealthy conditions, such as falling plaster, rats, faulty plumbing, unlit halls and stairways, lack of paint. Fires are a great hazard in slum housing. There are greater losses of life, more injuries, and property damage due to fires in slum areas than there are in other parts of the city.

Slum areas many times suffer from inadequate services. Garbage is often not picked up regularly; streets are infrequently cleaned; schools are often old, overcrowded, and poorly staffed.

There are more welfare cases, higher rates of crime and illness, more broken families, and more incidences of moving in and out of the slums than there are in other neighborhoods. The influx of people in and out may be partially caused by the migration

of people from depressed areas, seeking a better life in our larger cities.

Governmental Actions to Help.

The state has long been active in welfare matters. States were responsible for removing children from poorhouses and placing them with families or institutions for dependent children. State institutions have cared for epileptics, the mentally retarded, and the insane. States have long provided funds for the blind, widowed mothers of dependent children, and the aged. Today much of the cost of welfare payments is borne by the state.

Social Security.

The federal government has played an active role in securing the well-being of all citizens. The Social Security Act of 1935 has become the cornerstone of the American welfare system.

Both employers and employees pay taxes into a special trust fund administered by the federal government. After a certain number of payments, or time worked, a person is considered insured and certain benefits are his by right. This is called *social insurance*.

All of the following are entitled to benefits:

- retired workers, age 62 and over;
- disabled workers of any age;
- wives of workers entitled to retirement or disability benefits;
- unmarried dependents of deceased or disabled workers;
- widows or divorced wives of deceased workers;
- dependent widows, aged 62 or over, of deceased workers;
- no entitlement is necessary for anyone over 72.

Unemployment Insurance.

Another major social insurance established by the Social Security Act was *Unemployment Insurance*. A worker under certain conditions, is insured against the loss of his job. If he loses his job, he is entitled to receive cash payments for a certain number of weeks to tide him over until he finds a new job. Public-service workers handle benefit claims of the unemployed, and also try to place these workers in new jobs.

Everyone who is employed is not covered by unemployment

insurance. Agricultural workers, domestics, employees of state and local governments, casual workers, and employees of nonprofit organizations are not completely covered at the present time.

Medicare and Medicaid.

The Medicare and Medicaid Amendments to the Social Security Act were passed in 1965. *Medicare* is a type of social insurance which helps cover the cost of hospitalization and related care, doctor bills, and other health expenses. Most people over 65 are covered by Medicare.

Medicaid is a public assistance program. The federal government grants funds to states to set up programs to give medical assistance to the needy.

War on Poverty.

The federal government in 1964 launched an all-out "war on poverty." The government sponsored:

- programs to give the disadvantaged educational and vocational training;
- programs that gave students between the ages of 15 and 22 full or part-time jobs;
- work experience programs for unemployed or low-income adults;
- programs that trained low-income adults to become aides to professionals;
- pre-school programs that exposed low-income children to the cultural stimulation that middle-class children ordinarily receive.

Social-Service Workers.

Most public-service workers in local service are employed by public agencies established by city, state, or local government. These workers provide a variety of services to individuals, families, or groups in such areas as:

- Caseworkers aid families to understand their problems, and secure for them financial assistance, foster care, and homemaker service, if necessary;

- Group workers help people through group activities to understand themselves and others, and to work with others toward a common goal;

- Community workers help plan and develop health, housing, welfare, and recreation services, and services that strengthen family life and help family members to function socially;

- Child welfare workers attempt to improve the physical and emotional well-being of deprived children;

- Public-service workers work with schools to aid children whose behavior or progress is hampered by social conditions;

- Workers employed by hospitals and other health agencies aid patients and their families in solving problems accompanying illness, recovery, and rehabilitation.

Although a bachelor's degree is generally required at the professional level, more and more opportunities are becoming available for preprofessionals in this field. There are some jobs for high-school graduates in social welfare.

Individuals interested in social services should have the following abilities:

- an interest in people of all ages and backgrounds;
- an awareness of, and consideration for, the feelings of others;
- willingness to accept the viewpoints of others;
- the ability to handle unexpected or unpleasant situations.

At present, there is a shortage of well-qualified workers in social services, which is expected to continue through the next decade. Due to industrialization, many occupations that are common today will become obsolete, or will require a higher degree of skill than is presently required. Consequently, many workers will have to retrain several times during their working lives to meet these changes. The role of social-service workers will become more important, since many individuals will not be able to make adjustments without assistance.

TEACHER MANAGEMENT ACTIVITIES

- Assign students to plan a monthly budget for a family of four (children ages 8 and 10) on a $250 income.

- Arrange for a social service worker to visit the class.

- Discuss the duties of specific workers in social service.

- Ask students to give oral reports on aid to one of the following groups of people:

  blind;
  handicapped;
  mentally ill;
  mentally retarded;
  aged;
  poor;
  needy children.

- Construct a career ladder for a job family in a social service agency.

- Discuss career possibilities and requirements for employment in the field of social service.

RESOURCES

BOOKS:

Poverty and the Poor, Simon and Schuster, 1969.

Poverty and the Law, Houghton Mifflin, 1970.

Social Services to the Mentally Retarded, Charles C. Thomas, 1969.

The Shadow That Scares Me, Simon and Schuster, 1969.

Status: Achievement and Social Values, American Education Publications, 1971.

FILMSTRIP:

What You Should Know About Social Security, Visual Education, (black and white, purchase), 1969.

Social Problems, (Series 4), Society for Visual Education, (sound, color, purchase), 1969.

Man Against Want, Visual Education (black and white, purchase), 1969.

Helper of the Poor and Wretched, Jane Addams, Eye Gate House, (color, sound, purchase), 1970.

Illiteracy--A Social Problem, Visual Education, (black and white, purchase), 1969.

Alcohol, Society for Visual Education, (sound, color, purchase), 1969.

Delinquency, Society for Visual Education, (sound, color, purchase), 1969.

Leisure, Society for Visual Education, (sound, color, purchase), 1969.

FILMS:

The United States in the Twentieth Century, Coronet Films, (21 min., black and white, purchase), 1970.

Peace and Voices in the Wilderness, Bailey-Film Associates, (purchase), 1969.

The Social Security Story, U. S. National A-V Center, (14 min., color, purchase), 1969.

Social Security Out West, Serina Press, (28 min., color, loan), 1970.

A Peoples' Thing, NBC Educational Enterprises, (27 min., color, purchase), 1970.

The Old Ones, Columbia University Press, (29 min., black and white, purchase), 1969.

The Young Greats, Serina Press, (55 min., color, loan), 1970.

What's the Answer to Slums, Institutional Cinema, (15 min., color, rental), 1969.

Unseen Suburbia, NBC Educational Enterprises, (17 min., color, purchase), 1970.

AUDIO TAPE REEL:

Great Issues Series (Series 15), EMC Corporation, 1969.

Great Men and Great Issues - The Progressive Reformers, H. Wilson, 1969.

At Issue: The Quality of Life, H. Wilson, 1969.

Sound of Poverty, United Methodist Board of Missions, 1970.

INDIVIDUAL STUDENT ACTIVITY

Mr. and Mrs. Jones enter your social-service agency. They have no money and ask your assistance in finding them a home. They are the parents of two children.

Mr. Jones, who has an eleventh-grade education, is now unemployed due to illness. He is expected to recover in two months and at that time plans to look for a job. However, he states he is not good in math and you notice his English is poor. The family is now receiving a $250 monthly welfare check and is eligible for food stamps.

Mrs. Jones has a tenth-grade education. She was an average student, but does not have any skills that would help her secure a good job.

Why do you feel this family is in this situation? _____

_____

_____

_____

What problems would you try to solve as soon as possible? _____

_____

_____

_____

What things would you recommend that would help this family in the future?

_____

_____

_____

INDIVIDUAL STUDENT ACTIVITY

What social services are available in your community? Find out what help your community offers to each of the following groups.

Mentally ill	Physically handicapped
Blind	Mentally retarded
Ex-prisoners	Drug abusers
Poverty-stricken	Helpless children
Aged	Educational program for disadvantaged children

INDIVIDUAL STUDENT ACTIVITY

If you had $400 a month after all your food, medical bills, etc., were paid, how would you spend it? Select items from the chart below you may end up with, less than, but not over $400.

EXPENSIVE		AVERAGE		INEXPENSIVE	
House	$250.00	House	$150.00	House	$100.00
Car	$150.00	Car	$100.00	Car	$ 50.00
Clothes	$ 50.00	Clothes	$ 25.00	Clothes	$ 15.00
Vacation Trips	$100.00	Vacation Trips	$ 50.00	Vacation Trips	$ 10.00
Investments	$100.00	Investments	$ 50.00	Investments	$ 10.00
Leisure Activities (bowling, skiing, dining out, camping)	$100.00	Leisure Activities	$ 50.00	Leisure Activities	$ 25.00

INDIVIDUAL STUDENT ACTIVITY

Attitudes and personal characteristics are important in choosing a career. Answer the questions below honestly to determine whether or not you are well suited for a career in social services.

		YES	NO
1.	Do you like people?	____	____
2.	Do you enjoy helping people in difficult situations?	____	____
3.	Do you believe all people should have the same values you have?	____	____
4.	Are you a warm and friendly person?	____	____
5.	Are you easily discouraged?	____	____
6.	Are you understanding of others?	____	____
7.	Are you objective and not overly emotional?	____	____
8.	Do you listen to others well?	____	____
9.	Are you interested in improving social conditions?	____	____
10.	Do you consider the feelings of other people?	____	____
11.	Can you handle unpleasant situations?	____	____

All of the questions except 3 and 5 should have been answered yes. Of course, few individuals would have all of these abilities, and it is quite likely that you will develop in some areas as you mature.

Unit 9

HELPING EVERYONE ENJOY LIFE

This unit is designed to be presented in
Social Science or Physical Education classes,
Grades 7, 8, or 9

Here are the contents of Unit 9 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

CONCEPT 115

INSTRUCTIONAL OBJECTIVES 115

CONTENT 115

- State and Federal Recreation Areas
- Local Government Recreation Areas
- Types of Recreation
- Need for Recreational Workers
- Required Qualifications for Recreational Workers

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RESOURCES 119
- Books
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Unit 9

HELPING EVERYONE ENJOY LIFE

CONCEPT

PUBLIC SERVANTS PROVIDE SERVICES FOR THE HEALTH AND WELFARE OF ALL CITIZENS

INSTRUCTIONAL OBJECTIVES

1. Ability to list the reasons why communities provide recreational facilities and services.
2. Ability to identify the services of federal, state, and local government in the field of recreation.
3. Ability to list at least six careers found in the job family of recreational services.
4. Ability to recognize the relationship of interests and abilities to career selection.

CONTENT

Recreation is now considered an important, necessary part of everyday life. While our ancestors regarded play as sinful, Americans today believe leisure time is necessary for one's emotional and psychological well-being. Although many Americans work forty hours a week, many experts feel this will become obsolete in the near future. With shortened hours of work, extended vacations, and shortened work weeks, people will be seeking ways of effectively utilizing their leisure time.

State and Federal Recreation Areas.

State and federal governments have accepted some responsibility in providing recreational areas for citizens. More and more Americans are visiting our national parks, which the federal government has established to preserve many scenic and irreplaceable sections of the nation. When we speak of

"the National Parks" of the United States, we tend to think of the Grand Canyon, Yellowstone, Crater Lake, and Yosemite. Actually, there are over 200 national parks in the National Park System, though some are classified as monuments, historic sites, seashores, and recreation areas. The federal government hires park rangers to lead nature hikes and to give talks about the facilities where they work.

State parks were set aside as historic shrines or places of outstanding beauty, and were intended to protect the scenery for future generations. But with the passage of time, their primary purpose is now mainly recreational usage. Many are now places devoted for the most part to active recreation beaches, boating waters, campgrounds, winter sports areas, or playgrounds similar to those in city parks.

Local Government Recreation Areas.

The major responsibility for providing recreational services and facilities, however, belongs to local government. Recreation is valuable in releasing the stresses and tensions that build up as citizens participate in community life. If a community does not provide ways of releasing these tensions, inner disturbances and unrest could develop into outward anger that would be harmful to the community. Since many citizens are unable financially to belong to private clubs, local governments have acquired land to meet the recreational needs of people of all ages, races, and creeds.

Increased population has made the acquisition of land for recreational purposes difficult. Much of the land that was once open space has been taken over for the development of new communities. As urbanization grows, it becomes increasingly difficult to "get away from it all." People begin developing the attitude of "why bother," since they cannot escape the crowds anywhere. Communities must plan for the immediate and future recreational needs of their residents.

Recreation opportunities vary from community to community as climate, location, topography, cultural needs, and socio-economic levels differ.

Activities must be provided for many age levels, from pre-school to senior citizens. Services and facilities must be provided for people who need therapeutic recreation, such as victims of illnesses and accidents.

Types of Recreation.

A large part of recreation is of a physical nature. All forms

of games, sports, and athletics fall into this category. In these situations, recreation provides the opportunity to achieve better coordination and motor development. And too, learning to win modestly and to lose without bitterness aids in character development. Good habits and qualities, such as unselfishness, courtesy, friendliness, and courage, can be developed through participation in recreation activities.

Recreation is not, however, confined to games and sports. An effective community program should include:

sports and games,
arts and crafts,
dramatic activities and dances,
literary and mental outlets;
service to others,
social recreation,
camping and outdoor recreation,
hobbies,
special events.

Need for Recreational Workers.

As increasing numbers of people have recreational needs which must be met, the need for recreational workers and facilities has grown.

Many people are involved in teaching activities such as swimming, dancing, arts and crafts, and music. Some recreation leaders teach rules, regulations, and methods of participation in sports activities, as well as directing competitive and non-competitive games and contents.

Some workers are involved in planning and supervising activities and facilities. Recreation supervisors, who are college-trained, organize individual and group activities; conduct community programs; and administer physical, social, and cultural programs at campgrounds, community centers, and playgrounds. To do their jobs effectively, they study the recreation needs of the community to determine requirements for personnel, equipment, and supplies, and supervise the training and work of other workers in the department.

Required Qualifications for Recreational Workers.

More and more communities are requiring two years of post-secondary work as a minimum qualification for becoming a recreation leader. Recreation leaders not only teach a variety of activities, but must also inform supervisors when supplies and equipment are needed. They also collect and record fees, prepare reports, and evaluate workers under them.

There are some jobs in recreational service that do not require a college degree. Persons with high-school diplomas can become recreation trainees. Recreation trainees issue supplies and equipment, administer first aid, and instruct and participate in games and activities. They prepare reports on damaged and lost equipment, and deep the recreation areas clean for games and contents.

Swimming pool managers organize swimming lessons for many age groups. They not only teach swimming, but must make sure the pool stays in good condition, since bacteria can cause illness. Many high school and college students work as life guards and swimming instructors during the summer months.

Many cities have concert halls, amusement parks, tennis courts, golf courses, and zoos which are maintained by public funds. All of these facilities require workers to operate and maintain them for the benefit of all the residents of the community. As our population grows and our need for recreation increases, more and more public servants will be needed to provide the services we need for our leisure.

TEACHER MANAGEMENT ACTIVITIES

Ask the class to:

- Determine which recreational activities are most popular in your community by tabulating the answers given in the surveys.
- Discuss whether the community recreation program meets the stated desires of the residents.
- Have a class discussion about the qualifications and characteristics the students indicated to be necessary or desirable for camp counselors.
- Arrange for the class to tour three different types of recreational facilities which are public supported.
- Arrange for speakers from recreational agencies to visit the class.
- Discuss community college and four-year college programs in recreation.
- Ask each student to write a paragraph about a person he feels is an outstanding recreational leader, stating why he feels this is so.

RESOURCES

BOOKS:

Recreation and Leisure in Modern Society, Richard Kraus, Appleton-Century-Crofts Educational Division, 1971.

Community Recreation, A Guide to Its Organization, Harold D. Meyer et al., Prentice-Hall, Inc., 1969.

Fundamentals of Recreation, Thomas S. Yukie, Harper and Row, 1970.

Recreation Leadership, Dan H. Corbin, Prentice-Hall, Inc., 1970.

The Recreation Leader, Abingdon Press, 1969.

Recreational Sports, Instructional Aids, 1969.

Design for Play: The Child and Urban Problems, Van Nostrand Reinhold, 1969.

FILMS:

County and Community Recreation in Action, Indiana U, A-V Center, (29 min., black and white, purchase), 1970.

Town and Country Recreation, Athletic Institute, (20 min., color, purchase), 1969.

Careers in Recreation, Athletic Institute, (27 min., color, purchase) 1969.

Leaders for Leisure, Athletic Institute, (21 min., color, $4.00 rent), 1969.

$1,000 for Recreation, Athletic Institute, (12 min., color, $4.00 rent), 1969.

Recreating Spirit, Serina Press, (color, loan), 1970.

Forests and Recreation, Serina Press, (15 min., black and white, loan), 1970.

Summer, Serina Press, (27 min., color, loan), 1970.

INDIVIDUAL STUDENT ACTIVITY

A good recreational program must be planned. Recreation leaders often poll citizens to find out what activities they feel should be included in the program. Ask your friends and neighbors to choose four activities they enjoy most and rank them in order of preference:

- first choice (1),
- second choice (2),
- third choice (3),
- fourth choice (4).

	Example	1	2	3	4	5	6	7	8
Active games and sports									
Quiet games									
Dramatic activities									
Dancing	3								
Camping									
Literary activities	1								
Body conditioning and exercise	2								
Hobby groups									
Service to others									
Nature activities									
Horseback riding									
Golf									
Water sports									
Tennis	4								
Musical activities									
Trips and outings									
Educational groups and classes									
Special events									
Roller or ice skating									
Bicycling									

INDIVIDUAL STUDENT ACTIVITY

Does your community have a well-balanced recreational program? Tell where each of the following activities are offered in your community. Select only those places which are tax-supported.

Activities	Location
1. Active sports and games	
2. Quiet games	
3. Dramatic activities	
4. Dancing (square, ballet, etc.)	
5. Camping	
6. Literary activities (books, writing poetry)	
7. Body conditioning and exercise	
8. Hobby groups	
9. Service to others	
10. Nature activities	
11. Bridle trails	
12. Bike trails	
13. Golf courses	
14. Water sports	
15. Playgrounds	
16. Parks	
17. Tennis courts	
18. Roller or ice skating	
19. Musical activities	
20. Trips and outings	
21. Educational groups and classes	

INDIVIDUAL STUDENT ACTIVITY

You are in charge of selecting counselors for Lake Arrowhead Camp. Twenty children, ages 8-10, will spend one week at the camp. List in the spaces below the qualifications and characteristics you feel are necessary and desirable for counselors.

Necessary	Desirable but not Necessary

INDIVIDUAL STUDENT ACTIVITY

Recreation leaders plan all activities for each age group. In the spaces below, plan after-school activities for boys and girls ages 12 - 14.

Monday	Tuesday
Wednesday	Thursday
Friday	

INDIVIDUAL STUDENT ACTIVITY

Hobbies and interests can lead to satisfying careers. Think of a career that could result from an interest in each of the following areas:

Likes		Career
Little children	Example:	Day Camp Counselor
Swimming		_____
Nature		_____
Games and contests		_____
Hiking		_____
Dancing		_____
Drama		_____
Skiing		_____
Boating		_____
Camping		_____
Arts and crafts		_____
Teenagers		_____
Senior citizens		_____

Careers you may wish to use:

Water Safety Instructor	Athletic Director
Park Naturalist	Dramatics Coach
Camp Counselor	Wildlife Aide
Dance Instructor	Teen Center Director
Day Camp Counselor	Hobbies Director

Unit 10

DEVELOPING INFORMED AND EDUCATED CITIZENS

This unit is designed to be presented in
Social Science classes, Grades 7, 8, or 9

Here are the contents of Unit 10 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

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Unit 10

DEVELOPING INFORMED AND EDUCATED CITIZENS

CONCEPT — PUBLIC SERVANTS PROVIDE EDUCATIONAL PROGRAMS AND SERVICES

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the major job families in educational services.
2. Ability to explain the structure of public education in the United States.
3. Ability to compare and contrast the general duties of workers in educational services.
4. Ability to discuss the recommended qualifications for educational service workers.
5. Ability to match own interests and abilities to skills and activities found in education.
6. Ability to recognize that all careers require skills and abilities that must be mastered.

CONTENT

Background.

Years ago, American children were educated by their parents in their own homes. Colonial parents not only had to teach their children farming, trades, and housekeeping, but they also had to teach them how to read, write, spell, and do arithmetic. Of course, some parents were better teachers than others. Some, unfortunately, never found the time or did not have the desire to teach their children these basic things.

People who were wealthy began sending their children to private schools or hiring tutors to give them private lessons. But the majority of children who were poor could not read or write.

And, of course, few blacks could read because it was against the law to teach a slave to read or write.

Slowly, but surely, the idea grew that all Americans deserved good educations, whether they be rich or poor, black, brown, or white. If this was to be a land of opportunity, based on free enterprise, then every citizen should have the opportunity to gain as much education as possible. It was thought, too, that the prosperity of this nation depended on the education of its citizens. Since this was not going to be government by the elite, the average American citizen would have to be knowledgeable about the issues in order to cast an intelligent vote.

Today every state has a tax-supported free public education system. The American public school system is one of the largest and finest in the world. While in many countries the higher grades are reserved for the educationally talented, American educators attempt to give a good education to every pupil so that every student's capability will be fulfilled.

Our society has asked its educators to produce students who can master academic skills well enough to become productive citizens in the future. This means that all students must learn to comprehend, compute, communicate, and cope effectively. Students must learn to respect the rights of others, assume responsible citizen roles, develop positive attitudes and values, use leisure time wisely, and develop career goals. In addition, educational programs and personnel must produce students who are physically, mentally, and emotionally sound.

Some of the duties that were previously assumed by the family and church have been assigned to school personnel today. Although we do not have a national school system, our schools are alike in many ways because of the similar organization of our public school system throughout the various states.

Role of the Federal Government in Education.

The federal government today plays a major role in education. Educators in the U. S. Office of Education collect and analyze facts; administer grants; advise on school organization and administration; advise on teaching methods and ways of improving the teaching profession; and promote good relations in international education activities.

Much of the research that is being done in education is paid for by the federal government. Many programs in school districts are paid for by federal funds. Under the Smith-Hughes Act of 1917, the federal government began to assist states in setting up courses in industrial arts, home economics, and

agriculture. The National Youth Administration was established in 1935, giving part-time work to students who need funds to remain in school.

In 1958, the government, under the National Defense Education Act, began to spend funds to improve many courses in the schools of the nation. Books, scientific equipment, and student loans were all financed by the federal government. This has meant that part of the funds of almost every school district come directly from the federal government.

Role of the States in Education.

The primary responsibility for education, however, belongs to the states. Since 1918, every American state has had a compulsory school attendance law. Most states have laws which set standards that every school must meet. State laws require children to be vaccinated against certain diseases before they can attend school.

The state supplies a large share of the school district's funds. The money supplied by the state may be based on the enrollment and daily attendance of pupils in that district. In some states, the state government provides more money to poorer school districts so that all children will have equal educational programs.

The chief educational officer for the state is the State Superintendent of Education or Public Instruction, whose job is to see that all laws pertaining to schools are enforced. Each state has a State Department of Education, which helps local districts with course selection, program planning, and textbook selection. The Department decides what the qualifications for teachers of that state will be. Experts travel throughout the state helping local districts improve their educational programs. The results of research projects conducted by both the state and federal agencies are distributed through the state.

Colleges and university systems are maintained by the state to assure the students residing there a chance to receive a higher education at a reasonable cost. Community colleges financed by states offer a variety of courses which lead to an Associate of Arts degree in two years, enabling students to become paraprofessionals in many fields.

Role of Counties and Local Areas in Education.

The County Board of Education is a local unit established to provide support and control of education. The County Board

may select a County Superintendent; determine educational policies for that county; and prescribe rules and regulations for the management of schools.

Actual control of schools, however, belongs to the local community. Local property taxes pay more than half the cost of operating the community's schools. The federal and state government can not set policy for local districts. Nor do local municipal governments generally run the school system. Most communities have special school districts which are separate from local government. Each district has a Board of Education, whose members may be elected or appointed by city officials. School Board officials decide where and when to build new schools, determine the tax rate for the community, supervise the budget for the district, and determine school policy. They may, in some counties, choose the Superintendent of Schools.

The Superintendent of Schools initiates policy; recommends teachers and other school employees; administers all instruction and management of pupils; develops curriculum; improves instruction; and oversees the selection of textbooks, supplies, and equipment.

The local school district employs many people to meet the physical, intellectual, social, and emotional needs of students. Principals at each school are directly responsible for all aspects of their school's operation. They study the school's program, its needs, and the quality of instruction the teachers give. They work closely with school custodians to maintain a good learning environment for students. Working closely with the principal is the school secretary, who must establish good relations with the community, and keep records of all pupils, personnel, supplies, and equipment.

Role of the Teachers in Education.

The backbone of any school is its teaching staff. Pre-school teachers give children the opportunity to grow in social development and creative expression. Physical development is fostered by a variety of play activities. Kindergarten and elementary teachers provide opportunities for creative, social, and intellectual development. Children in elementary school learn reading, writing, spelling, science, social studies, health, and mathematics. Although many elementary instructors teach every subject to one class, others may be part of a team and may teach subjects to students in more than one class. Special teachers may give instruction and assist classroom teachers in subjects such as art, music, physical education, industrial arts, foreign languages, and homemaking.

While elementary teachers generally work with one group of students all day, secondary teachers usually specialize in one subject and teach that subject and related fields to more than one class.

Both secondary and elementary teachers usually try to plan each lesson carefully in advance. Various methods are used to teach materials, since subjects and needs of students differ. These techniques include lectures, small discussion groups, laboratory sessions, ability grouping, individualized instruction, and field trips.

All states require that teachers in the public school have a certificate to teach (called *certification*). The basic requirement for certification in most states is the bachelor's degree, with courses in subjects commonly taught in school, education, and practice reading. A master's degree or a five-year program is required for full certification in some areas. Prospective teachers should pursue a college preparatory course in high school.

Although many districts try to keep classes small, it is difficult for teachers to give individual attention to every student who needs it. More and more districts have tried to solve this problem by hiring *paraprofessionals*, or people who work with, and under the supervision of, the professional teacher.

The duties of the paraprofessional vary with the grade level or subject taught. While the pre-school teacher's aide may be asked to mix paint and dough, the elementary school aide may help children with reading and arithmetic as well. Secondary aides may plan and supervise field trips, supervise study halls, or help with term papers. Some aides may be asked to do housekeeping, clerical, or instructional assistance duties. Aides not only help with the many chores that are a part of teaching, but they supply the extra pairs of eyes and ears that add to a teacher's knowledge of the students in the class.

Teacher's aides generally have a high-school diploma. Some people, employed as Instructional Assistants, obtain an A.A. degree in Education Service.

Special Needs of Students.

Children who have special needs must be identified and placed in situations where they will benefit most. Teachers with special training work with children who are visually handicapped, have speech and hearing problems, or are physically handicapped. Psychologists and counselors aid the teacher in determining the causes of problems and finding ways to solve them. School social workers help children whose

problems have become severe.

Since health affects learning, school districts employ nurses to check suspected illnesses and to check the eyes and ears of each student. The federal government, too, has recognized the effects of hunger on learning capabilities and has made surplus foods available to schools at a low cost. Dieticians and school cafeteria workers prepare meals that are high in nutritional value to keep the student body healthy.

Role of Auxiliary Services in Education.

The number of people employed as school librarians is growing. About two-fifths of all librarians work in our elementary and secondary schools. School libraries provide instructional, general, and cultural reading material for the schools. They are financed by the school district. Librarians select and process books, and classify them so that they can be located quickly. They assist students in finding books and other materials through the use of card catalogs and indexes, and supervise the circulation and repair of all the books in the library.

Libraries and museums play an important role in informing our adult population. Public libraries offer fiction and reference books to the residents of the community. College libraries keep instructional and research materials for students and the faculty, while state libraries offer specialized materials that are of interest to state workers.

Professional librarians must usually attain a bachelor's degree and a fifth year of study in library science, after which they receive a master's degree.

Preprofessional workers work under the supervision of professional librarians and may be responsible for supervising the library's clerical staff. They may also catalog books; maintain files; operate audio-visual equipment; and control check-outs, renewals, and overdue materials.

In many libraries, workers at the preprofessional level are trained on-the-job in programs that require one to three years to complete. However, the trend is to prepare for library work in two-year college programs that offer an Associate of Arts degree in library technology.

Some school districts spend a considerable amount of money on bus transportation. In many cases, a number of smaller districts have combined to become one large district, since one district with a large budget can provide a better education at a lower cost to the community. In addition, since the

1954 decision by the Supreme Court that segregated schools are unconstitutional, some districts have used busing as a way of achieving integration. Today, thousands of students ride buses to and from school. Bus drivers, trained in school bus safety, have made riding the bus one of the safest ways to get to school.

Changing Role of Education.

Education is always in a state of change. The demands of society and technological advances have a direct affect on what is taught and how it is taught in our public schools. Material which is no longer relevant is dropped from the curriculum, while courses which are more meaningful are constantly being added to the school program. New ways of teaching, through such methods as the use of audio-visual materials (for example, opaque projectors and television), are always appearing on the educational scene. This means that teachers generally continue their education by taking college courses after work.

Adults of all ages and occupations are returning to school in large numbers. Continuing education is provided by teachers at the junior college, community college, and the adult high school level. Some adults attend programs carried on by colleges and universities both on and off campus. A growing number are receiving knowledge from educators on television.

Public-service workers in educational services strive to help all people reach their fullest potential. They have been given the task of giving all Americans the skills and knowledge necessary to keep our democratic system of government working. The fate of our society lies, in a large part, in the hands of these dedicated public servants.

TEACHER MANAGEMENT ACTIVITIES

- Discuss the individual student activity relating to values and money, pointing out that people differ in the things they value.
- Discuss the structure of your local and state educational systems and name the people who fill those positions, such as state superintendent, county superintendent, local school board members, local superintendent, principal.
- Arrange for school officials to explain their roles to your class.
- Arrange for your school secretary to discuss the cost of unexcused absences to your school.

- Visit a local elementary school and observe the activities in two different grades.
- Discuss the courses required to be taken by students who plan to go to college.
- Discuss the adult and continuing education programs in your local area.
- Ask the class to discuss the characteristics they feel are important in classroom teachers after they have finished the individual student activities concerning this.
- Ask each student to prepare a lesson plan and to teach a lesson to the class following his plan.
- Visit a local library and discuss with the staff the duties they perform.
- Describe the duties for typical entry level jobs in the education and library job families.
- Arrange for students to compare two salary schedules for educational workers.
- Discuss the advantages and disadvantages of jobs in educational services as discovered in the interviews conducted by the class.

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How Schools Aid Democracy, Benefic Press, 1969.

Community Service and Education Specialists, J. G. Ferguson, 1970.

Find a Career in Education, Putnam's Sons, 1969.

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School Functions, McGraw-Hill, (color, purchase), 1969.

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Democracy Builds a School, Visual Education, (black and white, purchase), 1969.

A Good Day In The Seventh Grade, Long Filmslide, (color, purchase), 1969.

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Work and Play at School, Eye Gate House, (color, purchase), 1970.

"Separate But Equal," Encyclopedia Britannica, (color, sound, purchase), 1969.

"Separate" is Unequal, Encyclopedia Britannica, (color, purchase), 1969.

Introduction to the Library, Eye Gate House, (color, sound, purchase), 1969.

The School Cafeteria Worker, Eye Gate House, (sound, color, purchase), 1970.

The Museum Serves the Community, Visual Education, (black and white, purchase), 1969.

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Operation Head Start, Serina Press, (28 min., black and white, loan), 1970.

Challenge to America: The Role of Education in Intergroup Relations, B'nai B'rith, (25 min., black and white, purchase), 1969.

Pancho, Serina Press, (14 min., color, loan), 1970.

The Ghetto Trap, Paulist Productions, (27 min., black and white or color, purchase), 1969.

Children Without, B'nai B'rith, (30 min., black and white, purchase), 1969.

A Chance to Learn, NBC Educational, (17 min., color, purchase), 1970.

The Giant Step, Connecticut State Department of Health, (18 min., black and white, loan), 1969.

More or Less Federal Aid to Education?, Institutional Cinema, (15 min., black and white, purchase), 1969.

Just Imagine, Indiana University A-V Center, (15 min., black and white, purchase), 1970.

Teachers Aides: A New Opportunity, U. S. National A-V Center, (21 min., black and white, purchase), 1969.

Librarian, Universal Education and Visual Arts, (16 min., color, purchase), 1969.

The Library Story, Encyclopedia Britannica, (15 min., color, purchase), 1969.

A Show of Hands, Wing Productions, (color, purchase), 1969.

Special Delivery, Highway Safety Foundation, (28 min., color, purchase), 1969.

INDIVIDUAL STUDENT ACTIVITY

People differ in subjects that they like. How do you like the following subjects?

	Very much	Some	O.K.	Not too much	Dislike
English					
Spelling					
History					
Social Studies					
Science					
Art					
Music					
Physical Educ.					
Home Economics					
Industrial Arts					
Typing					

How well do you achieve in these subjects?

	Very well	Well	Satisfactory	Fair	Poorly
English					
Spelling					
History					
Social Studies					
Science					
Art					
Music					
Physical Educ.					
Home Economics					
Industrial Arts					
Typing					

List the subjects that you like in which you do well. _____

_____

List the subjects that you dislike in which you do not do well. _____

_____

Are there any subjects that you like in which you do not do well? _____

_____

Are there any subjects that you dislike in which you do well? _____

INDIVIDUAL STUDENT ACTIVITY

Interview a worker in educational services and find out the following:

Job Title _____

1. What duties do you perform:

_____

_____

2. What do you like about your job?

_____

_____

3. What do you dislike about your job?

_____

_____

4. How much education is required?

_____

_____

5. Do you have the opportunity to advance in this job?

_____

_____

6. What personal qualities do you feel are desirable for your job?

_____

_____

INDIVIDUAL STUDENT ACTIVITY

You have observed many teachers since you have been in school. Which of the following do you consider most important? Put a "1" beside the quality you feel is most important, "2" beside the one you feel is the next important, etc.

I like a teacher who:

( ) has a pleasant voice.
( ) is always well prepared.
( ) makes the class interesting.
( ) is friendly and kind to all students.
( ) makes everyone do their best.
( ) knows the subject well.
( ) is neat and attractive.
( ) has a pleasant way of controlling students.
( ) has an orderly classroom.
( ) has an interesting personality.

I am unhappy with a teacher who:

( ) works the class too hard.
( ) makes the class too easy.
( ) is seldom prepared.
( ) has a dull way of teaching.
( ) is not an interesting person.
( ) has an unpleasant voice.
( ) is not neat and attractive.
( ) favors a few people.
( ) doesn't know the subject well.
( ) has a poor way of controlling students.
( ) lets students become disorderly.

INDIVIDUAL STUDENT ACTIVITY

Would you like a career in educational services? Answer the questions below by checking the proper box.

	YES	NO
Do you like working with children?		
Would you like working with teenagers?		
Would you like to teach adults?		
Are you patient?		
Do you have a good sense of humor?		
Are you creative?		
Are you able to accept responsibility?		
Do you like to learn?		
Can you carry out plans until they are complete?		
Do you get along well with others?		
Would you enjoy working with people from all racial and religious groups?		

Unit 11

A CLEAN ENVIRONMENT FOR ALL

This unit is designed to be presented in
Science, Social Science, or Mathematics classes,
Grades 7, 8, or 9

Here are the contents of Unit 11 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

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Unit 11

A CLEAN ENVIRONMENT FOR ALL

CONCEPT

WE DEPEND ON PUBLIC SERVICE WORKERS TO DIRECT AND MANAGE PROGRAMS THAT WILL PROTECT AND PRESERVE OUR ENVIRONMENT

INSTRUCTIONAL OBJECTIVES

1. Ability to identify at least four present or past abuses of natural resources.
2. Ability to list six natural resources which governmental agencies are responsible for managing.
3. Ability to compare the general functions of workers within resources management.
4. Ability to compare the educational requirements, values, and competencies for various careers in resources management.
5. Ability to recognize that careers require different skills and abilities that must be mastered.
6. Ability to see the necessity for long-range planning in preparing for careers.
7. Ability to match their individual abilities and skills with the qualifications for a career in resources management.

CONTENT

Background.

In the 1960's, many Americans became aware for the first time that our environment was in serious danger. For the first time, Americans began to recognize the fact that our air was polluted, our wildlife was disappearing, and much of our water was unusable. "How did this happen?" people asked.

For years Americans had viewed their natural resources as abundant and costless. Forest areas seemed endless, waters teemed with a variety of fish, wild life flourished in many areas, and an unlimited supply of minerals lay beneath the ground. Americans were justly proud of the thousands of acres of rich topsoil that enabled us to have the highest standard of living in the world.

Wasting of Our Natural Resources.

Our rise from a nation of small farms and stores to the greatest industrial giant was at a great cost to our environment.

Land, an irreplaceable natural resource, was used in a haphazard way. Once land is modified, it cannot wholly regain its former condition. When highways and parking lots are paved, much of this land is permanently lost for agricultural use.

Topsoil is said to be more precious than gold. But soil, a resource replaceable only by centuries of nature's cycles, was repeatedly worn out by overuse and mismanagement, and the soil in many areas in our country (such as the cotton lands in the South) became depleted. When our forest lands were cleared for settlement, little thought was given to construction practices. Consequently, floods and fires caused many prosperous land areas to become victims of erosion.

Forestlands. Forests usually renew themselves, but without assistance from man, the process is very slow. Our ancestors badly abused our forest resources. Tens of thousands of acres were cleared, often wastefully, with no thought of reseeding or planning for future needs. Trees were cut down indiscriminately, and blight was not controlled. Our original areas of forest land have shrunk from a tremendous 822 million acres to about 149 million acres that can be classed as commercial forest and woodland.

Grasslands. Grasslands are important replaceable natural resources (under some conditions). Livestock and game animals depend on grassland and edible wood plants for support. The grazing lands of the buffalo, elk, and wild sheep were misused in the past. Animals were allowed to overgraze, killing the cover crops of grasses and shrubs that prevent erosion.

Minerals. Minerals are clearly irreplaceable. All of the minerals that will ever be on earth are present today. In the past, mountains were washed into rivers in the search for precious minerals. Dredging operations produced thousands of acres of sterile land.

Water. Water is an inexhaustible natural resource. However, it has been badly mismanaged. Factories, rural and urban

dwellers, and vacationers all dumped raw sewage into our nation's waters. Disastrous oil spills made some of our water too contaminated to support wildlife and fish. Human wastes, detergents, and litter caused much of the water to become too polluted to use. The Cuyahoga River in Cleveland became so polluted that it actually caught fire. Many experts feel that the American side of Lake Erie is beyond help. Even the oceans are dreadfully polluted in certain areas.

Air. Although air is an inexhaustable natural resource, it, too, has been abused. When air becomes polluted, plant life is destroyed, animals are poisoned, and illnesses - emphysema, heart trouble, asthma, and bronchitis - become aggravated. Air pollution has caused deaths in many parts of the world, including London, England, and Donora, Pennsylvania. Air pollution disasters are caused by what is, fortunately, an unusual combination of weather conditions. With no wind to move polluted air out and a heavy mass of cold air on top to prevent its rise, air pollution is apt to reach the crisis level.

Why is there such Wasting of Resources?

At the root of our environmental problems is our American way of life - our search for luxuries, our preoccupation with new gadgets, and our dreams of affluent living. Americans are envied because of their appliances and shiny cars, but the factories that produce those gadgets spew waste into our rivers, and our luxurious automobiles are a major cause of air pollution.

Americans today are perhaps the best fed people in the world. In providing great varieties of food for the rest of the nation, our farmers have had to add synthetic fertilizers to the soil. In order to meet the demand for perfect crops, farmers have had to control pests and diseases by spraying artificial pesticides, which many experts feel are damaging to the environment.

Science and technology have played a major role in the achievement of the high standard of living we enjoy today. Synthetics and plastics have been developed, which are not only satisfactory, but often better than natural products themselves. However, some products, such as plastic, are environmentally destructive because they do not decompose. Then, too, the production of synthetics imposes a large burden on our natural resources. Not only are synthetics made from natural resources, but their manufacture creates enormous demands on water and power.

The demand for products to be packaged attractively has made packaging a major occupation, yet the packages in which we

purchase our goods threaten to bury us in mountains of solid waste.

Our demand for consumer goods requires increased energy, and further depletes our natural resources. Our love for disposable items may seem inexpensive, but they result in a shabby and unhealthy environment.

Our staggering population growth makes our environmental problem worse. The population of the United States grew from 105.7 million in 1920 to 203.1 million in 1970. In a recent year Americans used approximately 118 trillion gallons of water, 132 million tons of iron, and 1.5 million tons of copper. Man has been mining coal for 800 years, but one-half of all the coal ever taken out of the earth was mined in the past three decades. The first oil well in the United States produced 9 gallons of oil per day. The daily output of oil wells in the United States is now more than 40 million times that amount.

How are We Coping with the Situation?

Public-service workers are dealing with the environmental damage which has already occurred, and are taking steps to prevent future damage. People who are managers of our natural resources analyze existing and future problems, and determine programs that will abolish those problems. Natural resource managers determine what types of action must take place to modify, protect, conserve, or improve our country's land, water, vegetation, and wildlife.

Fish and game wardens work in refuges, parks, preserves, and forests, enforcing the laws controlling hunting and fishing. They make sure that all hunters and fishermen have proper licenses, that no animals are taken illegally, and that the methods used by sportsmen are lawful. They make arrests and serve warrants when violations occur. Wardens must also collect information about the number of wildlife populations under their jurisdiction and the amount of food available to these animals.

Wildlife attendants may choose, care for, transfer, and incubate the eggs of fish and birds. They install and maintain racks and traps, and record data about wildlife for breeding purposes. Fish culturists watch over smaller fish while they grow, making sure that they stay healthy and strong. Fish hatchery managers are responsible for running the entire hatchery. After the fish have reached a certain size, they are released into our lakes and rivers.

Foresters are responsible for managing our nation's forests for recreation, economic, and aesthetic purposes. They

insure that our timber is cut efficiently, and that our forest areas are reforested. They must patrol around the forest constantly to see what condition the forest is in and to spot potential sources of trouble. Foresters plan and direct the development of parks and picnic areas, direct fire fighting activities, and conduct programs that prevent soil erosion, floods, tree diseases, and pests.

Range managers are responsible for the care of our nation's rangelands, which cover nearly one billion acres. They constantly research and study better procedures in range development and provide assistance to owners of privately held grazing lands.

Soil conservationists study, analyze, and classify various types of soil to determine its proper use. They determine the soil's capabilities for growing different crops, and give advice to land owners about the best use of their soil.

A growing number of technicians research methods and ways of purifying our air and water. They install and maintain the equipment that is used to gather samples and monitor systems that detect air and water pollution. Analysts then determine the degree of contamination and make recommendations to improve our air and water. Other public servants who protect our natural resources include water treatment operators and solid waste disposal operators.

What is the Role of Government?

Local, state, and federal governments all play major roles in preserving our environment. All levels of government have passed pollution laws and have hired inspectors to enforce them.

Many federal departments are involved in resources management. The Department of the Interior's Bureau of Land Management administers over 470 million acres of federally owned land. The National Park Service administers the National Park System, and assists state and local agencies in park and recreation matters. Federal agencies plan, assist, and manage water storage projects, fish and wildlife refuges, national forests, and grasslands. The federal government researches ways of protecting our mineral resources, conserving our fish resources, and ways of disposing of solid waste. It also provides grants, loans, and technical assistance in many fields of environmental protection.

What will Happen in the Future?

Although public service workers are battling to protect our

environment, it will be up to all Americans to win the battle. Perhaps we will have to change our consumer habits, change our life styles, and learn to live "ecologically sound" lives. We are a part of a larger "ecosystem," and we must learn to adjust to it. What our country will be like for future generations will depend on how wisely we use our natural resources. For this reason, workers in resources management are playing a growing role in our society.

TEACHER MANAGEMENT ACTIVITIES

- Arrange the class into small groups; i.e., air, water, solid waste, fish and wildlife. Have each group research and discuss local laws pertaining to their subject.
- Arrange for speakers from local resource management agencies to visit the class.
- Assign class to go through the classified ad section of the newspaper and clip all jobs in resources management.
- Provide students with high school course descriptions and point out those which are relevant to resources management.
- Make a list of the sources of pollution in your community.
- Ask the class to make a list of the animals that have become extinct. Make a list of animals which are in danger of becoming extinct.
- Leave a white handkerchief on a table for three days. After three days, let the class view the handkerchief under a hand lens or magnifier to observe the effects of air pollution.
- Arrange for your class to work in a much smaller area than usual. Ask them to tell how crowding affected them.
- Study the effects of noise pollution by comparing the class's work under quiet and noisy conditions.
- Role-play by dividing the class into five groups and simulate the situations listed:

  Group 1: The Wilson Manufacturing Company representatives. Their company would like to build a plant in your community. However, the company's plans show that the plant refuse will be dumped into the river.

  Group 2: The stockholders of the Wilson Manufacturing Company. If the company is not allowed to dump its refuse in the river, the stockholders will receive less profit.

Group 3: The people who will be employed by the Wilson Manufacturing Company. If the company is not allowed to build a plant, these people will be unemployed.

Group 4: Citizens for clean environment. They believe a clean environment is more important than industry. These people will not be dependent on the new plant.

Group 5: The Town Council. This group will decide whether the Wilson Manufacturing Company will be allowed to build the factory.

° Obtain a commercial water pollution detection kit and conduct classroom experiments.

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The Conservation of Our Resources, (Ser. 9), Eye Gate House, (color, sound, purchase), 1970.

Our Water and Air, Coronet Films, (color, sound, purchase), 1970.

Water Conservation Today, Society for Visual Education, (color, sound, purchase), 1969.

Water and Its Conservation, Eye Gate House, (color, sound, purchase), 1970.

Land Conservation Today, Universal Educational and Visual Arts, (color, sound, purchase), 1969.

Mineral Conservation Today, Society for Visual Education, (color, sound, purchase), 1970.

The Conservation of Minerals, Eye Gate House, (color, sound, purchase), 1970.

Soil and Its Conservation, Eye Gate House, (color, sound, purchase), 1970.

The Conservation of Our Forests, Eye Gate House, (color, sound, purchase), 1970.

FILMS:

Basic Ecology, Encyclopedia Britannica Educational Corporation, (27 min., black and white, or color, purchase, 1969).

Alone in the Midst of the Land, NBC Educational, (27 min., color, purchase), 1970.

The Ravaged Earth, NBC Educational, (27 min., color, purchase), 1970.

Air We Breathe, Connecticut State Department of Health, (20 min., black and white, loan), 1969.

Air Pollution, Journal Films, (11 min., color, purchase), 1970.

The Poisoned Air, Carousel Films, (50 min., black and white, or color, purchase), 1969.

To Clear the Air, Connecticut State Department of Health, (22 min., color, loan), 1969.

With Each Breath, Serina Press, (29 min., color, loan), 1970.

Room to Breathe, NBC Educational, (26 min., color, purchase), 1970.

Troubled Waters, Serina Press, (28 min., color, loan), 1970.

Your Friend the Water, Serina Press, (6 min., color, loan), 1970.

Health and the Cycle of Water, Connecticut State Department of Health, (20 min., black and white, loan), 1969.

The Water Famine, Carousel Films, (54 min., black and white, purchase), 1969.

Sanitary Landfill: Open Dump Conversion, Connecticut State Department of Health, (13 min., color, loan), 1969.

Conserving Our Forests Today, Coronet Films, (11 min., black and white or color, purchase), 1970.

National Parks: Our American Heritage, Bailey Film Associates, (17 min., color, purchase), 1969.

No Turning Back, NBC Educational, (10 min., black and white, purchase), 1970.

Keep'em Out, Connecticut State Department of Health, (10 min., black and white, loan), 1969.

INDIVIDUAL STUDENT ACTIVITY

Wildlife managers have to identify plants and animals in nature areas. Fill in the chart below, showing five species of fish, game, birds, wild flowers, and trees that are common in your area.

Fish					
Game					
Birds					
Wild Flowers					
Trees					

INDIVIDUAL STUDENT ACTIVITY

Wildlife managers often compare the number of animals in one area to the number of those animals in another area. They also compare the size of animals in an area to the size of animals in another location.

Choose an animal that is frequently found in your neighborhood. Select two areas that you would like to compare. (Example: Cats near the school, compared with cats close to the highway). Walk through each area and record the number of animals found in each area in a certain time length.

You may wish to compare the areas two times a day:

Time _____ Area #1 _____ Time _____ Area #2 _____

Time _____ Area #1 _____ Time _____ Area #2 _____

Have the activities of man caused a difference in the two areas? _____

_____

_____

What other conditions could have caused the differences in the number of animals observed?

_____

_____

_____

_____

INDIVIDUAL STUDENT ACTIVITY

Choose a worker in resources management. Using research material and interviews, find out the information below.

Occupation: _____

I. Educational Requirement:

_____

_____

Relevant High School Courses:

_____

_____

Job Performance:

_____

_____

Salary Range:

_____

Desirable characteristics, interests, abilities, and values:

_____

_____

2. Tell how your own characteristics compare with those recommended for this occupation.

_____

_____

_____

Unit 12

DIRECTING COMMUNITY GROWTH

This unit is designed to be taught in
Social Science, Mathematics, or Language Arts Classes,
Grades 7, 8, or 9

Here are the contents of Unit 12 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

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Unit 12

DIRECTING COMMUNITY GROWTH

CONCEPT

PUBLIC SERVICE WORKERS PLAN AND CONTROL THE DEVELOPMENT OF OUR COMMUNITIES

INSTRUCTIONAL OBJECTIVES

1. Ability to identify problems in the field of rural, urban, and community development.
2. Ability to identify the major job families in rural, urban, and community development.
3. Ability to list the educational qualifications and desirable course work for jobs on the entry, skilled, and professional levels of employment in this job family.
4. Ability to match own interests and abilities with skills and activities found in community planning.

CONTENT

Background.

When our forefathers landed on the shores of this country, they were awed by the seemingly unlimited amount of land that they found. Pioneers who came from Europe where land was scarce, expensive, and often of poor quality, were overwhelmed at the sight of acres of rich land that could be acquired for little or no money. Since there was such a superabundance of land, there was little interest in controlling land use. As most of the nation was composed of farmers, there was a strong belief in private property rights. The right to buy and sell land and to do what one wants to do with it became a fundamental principle in the American way of life.

What is "land"? Is it a commodity, the function of which is to enable its owner to make money? Or is it a resource which can

only be rented by generation after generation? Actually land is both a commodity and a resource. Although we are free to buy and sell land to make a profit, we must also treat land as a resource that must be conserved.

If one traveled from the Pacific Coast to the Atlantic Coast, it would be easy to conclude that there is an abundance of land today. Actually, land is scarce. Our population is growing at a staggering rate, but land, as a fixed resource, remains constant. Some cities have tried to gain more land area by building out into rivers and oceans, but there is a limit to how much land can be gained in this way.

Competitive Uses for Our Land.

Not only is available land scarce, but there is a great competition for the land that does exist. If we look around, we can see some groups who are competing for land for various reasons:

Need for Food. We must have land for growing crops and raising farm animals. We must keep in mind that once an agricultural area is paved, it can never wholly revert to its natural state. As our population increases, our need for food will rise dramatically. Some experts are already predicting that there will be dire shortages of food in the near future.

Need for Shelter. Our need for shelter makes it necessary for us to use a large portion of our land for housing. Everyone needs a certain amount of space to be comfortable. When individuals are deprived of adequate space, their well-being becomes affected and disastrous results are apt to occur. Although many Americans live on large over-sized lots, a vast number of Americans live in crowded conditions, with too many families jammed together in very little space.

Need for Industry. Much of our land is taken up by business and industry. Of course this is a necessity, too, for without business and industry, many residents would be without jobs! Many communities actively seek to induce industries to open factories in their town to aid the community's economic development. The taxes paid by business and industry are a large percentage of the total taxes taken in by many local governments. Without industry's tax money, local governments would be unable to provide many services needed by the residents of their communities. Although our communities need business and industry, they do take up valuable land. Many factories now cover acres of what was once rich, agricultural land.

Need for Community Services. Providing services for a community requires land. Think about the land used for fire stations, police stations, government buildings, and schools!

Need for Transportation. One of the costliest ways in which land is used is using it for transportation. Highways, streets, parking lots, and automobile junkyards all consume a large portion of our land. Yet we must have transportation systems to transport goods and people! Getting to work without our highway and street systems would be an impossible task for many Americans today.

Need for Recreation. Most of us like to "get away from it all." But getting away from the hustle and bustle of community life often means going to a huge land area used for recreational purposes. Recreation enhances our well-being, but parks and playgrounds often cover acres of valuable land.

Need for Open Space. People get warm feelings from viewing open space or "green belt" areas around their communities. Green belts lessen the sense of being crowded and are aesthetically pleasing to view. But open space areas are rapidly disappearing. People who love to drive in the country often find themselves entering one suburb while leaving another. What is causing this phenomenon?

Americans are rapidly deserting rural areas and are migrating to the city-suburban areas. Farm land, in turn, is being used up for cities and suburbs. We now speak of metropolitan areas, defined as areas with populations greater than 50,000 people. Many times the suburbs surrounding one city connect with the suburbs surrounding another city, forming one huge megalopolis.

City Planning - One Answer.

City planners must grapple with the problems of today, in addition to anticipating problems that could emerge in the future. They must decide what improvements are necessary, how the land can be best used, and how to make the area attractive. They must decide which needs of the community are most crucial, and should be solved as soon as possible. Each community has its own distinct flavor, therefore city planners try to preserve the uniqueness of the community they serve.

In order to direct community growth, city planners develop a master plan for their locale. Master plans show where the residential, industrial, and commercial growth will be. Space must be provided for hospitals, parks, fire and police protection, hospitals, and recreational facilities. Planners must be knowledgeable about traffic patterns, electrical supplies, and the availability of water presently and in the future.

The planner's task is not an easy one. Since many physical, social, and economic factors are interrelated, the planner

must proceed carefully. For instance, the construction of an expressway between the center of city and a suburban area may offer better mobility to one group of citizens, but it may destroy the neighborhood of another group of people, and possibly create a slum into which the displaced people will crowd. Perhaps it will cause a marsh to silt up and thus deprive wildlife of their breeding grounds.

Public service workers try to see the beneficial and harmful consequences of their decisions, weigh them against each other, and then recommend the proper actions to be taken.

Urban Renewal - Applied City Planning.

Although the city planner's dream is to design a complete new city, most are faced with old and decaying neighborhoods in the city's inner core, which are trash-filled, rat-infested slums. Many residents of slum neighborhoods have economic, social, and physical problems that prevent them from buying or renting homes in better neighborhoods. The city planner must decide which buildings can be rehabilitated and which ones must be cleared away. This process is called *urban renewal*.

Urban renewal is a difficult matter because many people, particularly elderly citizens, have strong ties to their existing neighborhood and resist efforts to destroy it, even if the new surroundings are considered better. Then, too, suitable housing must be found for those people who are displaced by urban renewal. Many cities hire urban renewal aides to assist these people to find suitable housing, and to adjust to their new surroundings after their neighborhoods have been renovated. Unfortunately, the buildings that replace the former ones often cost more than the displaced residents can afford.

Many communities have erected low-income housing units run by project managers to meet this need. Tenant aides help former slum residents learn how to care for their homes, establish household routines, and to spend their money wisely. Without this assistance, the new housing development could deteriorate into a slum area again.

Since the cost of urban renewal is great, most of it is financed by the federal government. The federal government has spent many millions of dollars building model neighborhoods in 150 cities. This effort has often been called the "model cities" program.

Building and Zoning Laws - Another Answer.

What causes slums? Slumlords often subdivide buildings into

tiny, inadequate apartments, which results in overcrowded conditions. Faulty construction of houses also causes slums to develop.

Communities have sought to prevent the development of slums by passing *building* and *zoning* laws. *Zoning laws* were designed to prevent land from being used in a manner that would depreciate the value of neighboring land. Zoning is simply a process by which residents of a local community examine what people propose to do with their land and decide whether or not they will let them do it. Zoning laws restrict the types of buildings that can be constructed in any area of a community. They may prohibit the building of residences in an industrial area, or the building of a factory in a residential area.

Building codes also control and direct the types of buildings that can be built in an area. Specifications such as wiring and building materials are covered in building codes.

Building and zoning laws, however, must be enforced. Building inspectors are responsible for the health and safety of citizens in residential, commercial, and industrial buildings. Therefore, they inspect buildings and building construction for compliance with local building codes. Zoning inspectors check to see whether the land and buildings are used according to established zoning codes.

Requirement for City Planners.

At the present time, the area of rural, urban, and community development is one that is expanding at a tremendous rate. Almost all communities in America are involved in planning and controlling community growth, and this in turn has created great demands for both professionals and paraprofessionals in this field.

City planning usually requires a college degree in architecture, landscape architecture, or engineering, or in one of the social science fields. A master's degree is most desirable. High school graduates with a knowledge of drafting can become planner's aides. The paraprofessional level of planning technician often requires an A.A. degree in city planning. Anyone who would like to enter this field should take as much math as possible, drafting, mechanical drawing, and art.

Entry-level jobs in building, zoning, and drafting usually require a high school education or its equivalent, with some knowledge of drafting or its related fields. Two years of post-secondary work or experience are often required for zoning technicians and surveyors. At the professional level, five years of experience in housing, construction, architecture, or engineering, plus three or more years of college, are required.

A college degree in public or business administration is a requirement for becoming a project manager. One can become an urban renewal aide, however, with two years of college work.

As America continues to grow, many more public-service workers who plan and control the development of our communities will be needed in the future.

TEACHER MANAGEMENT ACTIVITIES (FOR LARGE GROUPS OF PUPILS)

- Divide the class into small groups to develop the parts of a community's master plan. Each group will select one of the following community needs, and will sketch where those facilities will be on the master plan:

  recreation,
  education,
  business and industry,
  residential areas,
  cultural and entertainment facilities,
  transportation,
  city services,
  green belt and agricultural areas.

  After each group has completed its part of the master plan, ask all of the groups to work cooperatively to prepare a master plan. Provide a large sheet of paper for this activity. Each group should be allowed to express its opinions on each part of the plan. The teacher may wish to resolve conflicts by majority rule.

- Compile the results of the community action surveys. Determine which needs are most critical to each age group.

- Discuss the master plan for your community.

- Assign students to do a report on one of the following city planners: Major Pierre Charles L'Enfant, Benjamin Banneker, Le Corbusier, or Lucio Costa.

- Obtain the schedule of courses offered at the high school in your area and discuss the courses that relate to rural, urban, and community development.

- Invite an urban planner, a building inspector, or a zoning technician to make a presentation to the class on the opportunities in this field.

- Prepare a bulletin board about area planning problems.

- Arrange for students to visit a local planning, urban renewal, or development agency, and view on-the-job activities in this occupational area.

- Arrange your class in four groupings. Each group will research and discuss one of the four major job families in the field of rural, urban, and community development--planning; building and zoning; acquisition; or community action. Each group will list and discuss the functions and duties of workers, and the recommended qualifications of workers in their category.

- Role-play (simulate actions) for these types:

  Student one: A farmer who has rich, agricultural land to sell;
  Student two: A business man who would like to build a shopping center;
  Student three: A real estate developer;
  Student four: A community recreation leader;
  Student five: A factory owner who will employ many people.

  Students 2, 3, 4, and 5, will make presentations to Student 1, trying to convince Student 1 that they should be allowed to purchase the land. The class will decide individually which student has presented the best arguments and has won the right to buy the land.

- Discuss the following questions:

  Where are low-income families and the more affluent families most likely to live in a community?

  What problems exist when the poor are concentrated in the inner city?

  What are the advantages and disadvantages in the various means of aiding low-income families in housing (i.e., rent supplements, housing projects, low-income single dwellings)?

  How do physical surroundings affect the well being and outlook of people?

  Why do elderly residents of a community have a difficult time when their neighborhoods are rehabilitated by urban renewal?

  What are the advantages and disadvantages of living in the inner-city? What are the advantages and disadvantages of living in the suburbs?

RESOURCES

BOOKS:

Challenges in Our Changing Urban Society, Laidlaw Brothers, 1970.

Sick Cities, Penguin Books, 1969.

The Changing City, Ginn and Company, 1969.

Exploring the Urban World, Globe Book Company, Inc., 1972.

The City as a Community, Washington Square Press, 1970.

Making Cities Better Places to Live, Business Week, August 22, 1970.

Urban Process: Planning With and For the Community, Architectural Record, May, 1969.

The City in the World of the Future, J. B. Lippincott, 1969.

The Challenge of Urban Planning, American Institute of Planners, 1970.

Citizen Participation in Urban Development, Volumes I and II (Ser. 2), NEA, 1969.

Career Opportunity: Community Service and Related Specialists, J. G. Ferguson Publishing Company, 1970.

Urban Planner, Chronicle Guidance Publications, 1970.

Employment Outlook for Urban Planners, U. S. Department of Labor, 1971.

Unusual Careers, Martha E. Munzer, Alfred A. Knopf, Inc., 1970.

Can I Be a Draftsman?, General Motors, 1968. (Free).

Tenant Services Personnel: 48 Job Descriptions from Large Housing Authorities, National Association of Housing and Redevelopment Officials, 1970.

FILMSTRIPS:

The City as a Community, McGraw-Hill, 1969.

Planning a Community, Visual Education, 1969.

Planning Our Cities, Wayne State University, 1969.

Planning Our Cities, Key Productions, 1969.

City and Suburb: Crisis and Opportunity, Key Productions.

Building Our Cities, Visual Education, 1969.

Dependence on City Workers, Curriculum Materials Corp., 1969.

Your Future as a Draftsman, Vocational Education, 1970.

FILMS:

Community, Indiana University A-V Center, (59 min., 16 mm., black and white, sound), 1970.

Overload in the Cities, CENCO Education Aids (15 min., 8 mm., color, sound), 1969.

The Changing City, Churchill Films, (16 min., 16 mm., black and white or color, sound), 1970.

Urban Sprawl, Arthur Barr Productions, (15 min., 16 mm., color, sound), 1970.

Don't Crowd Me!, CENCO Education Aids, (15 min., 8 mm., color, sound), 1969.

Big City--1980, Carousel Films, (52 min., 16 mm., black and white, sound), 1969.

A Different Kind of Neighborhood, Universal Education and Visual Arts, (22 min., 16 mm., color, sound), 1969.

VIDEOTAPE:

Where To? The City and The Future, MPATI, (20 min.), 1969.

MULTIMEDIA:

Urban Life Series Library, Society for Visual Education, 1969.

INDIVIDUAL STUDENT ACTIVITY

Community action leaders take surveys to determine what the most critical needs of their communities are. Fill out the chart below by interviewing ten residents of your community and asking each resident to choose the one aspect of your community that needs the most improvement. Try to include every age group in your sample.

Improvement Needed	Residents 1	2	3	4	5	6	7	8	9	10
Police protection										
Fire protection										
Parks										
Recreation center										
Better lighting										
Better schools										
Better transportation										
Better homes										
Day care center										
Senior Citizens activities										
Closer Medical facilities										
Better trash collection										
Street maintenance										
Museums & libraries										
Sports & entertainment										
Traffic lights										

Age of Resident										
0 - 18										
18 - 30										
30 - 55										
Over 55										

INDIVIDUAL STUDENT ACTIVITY

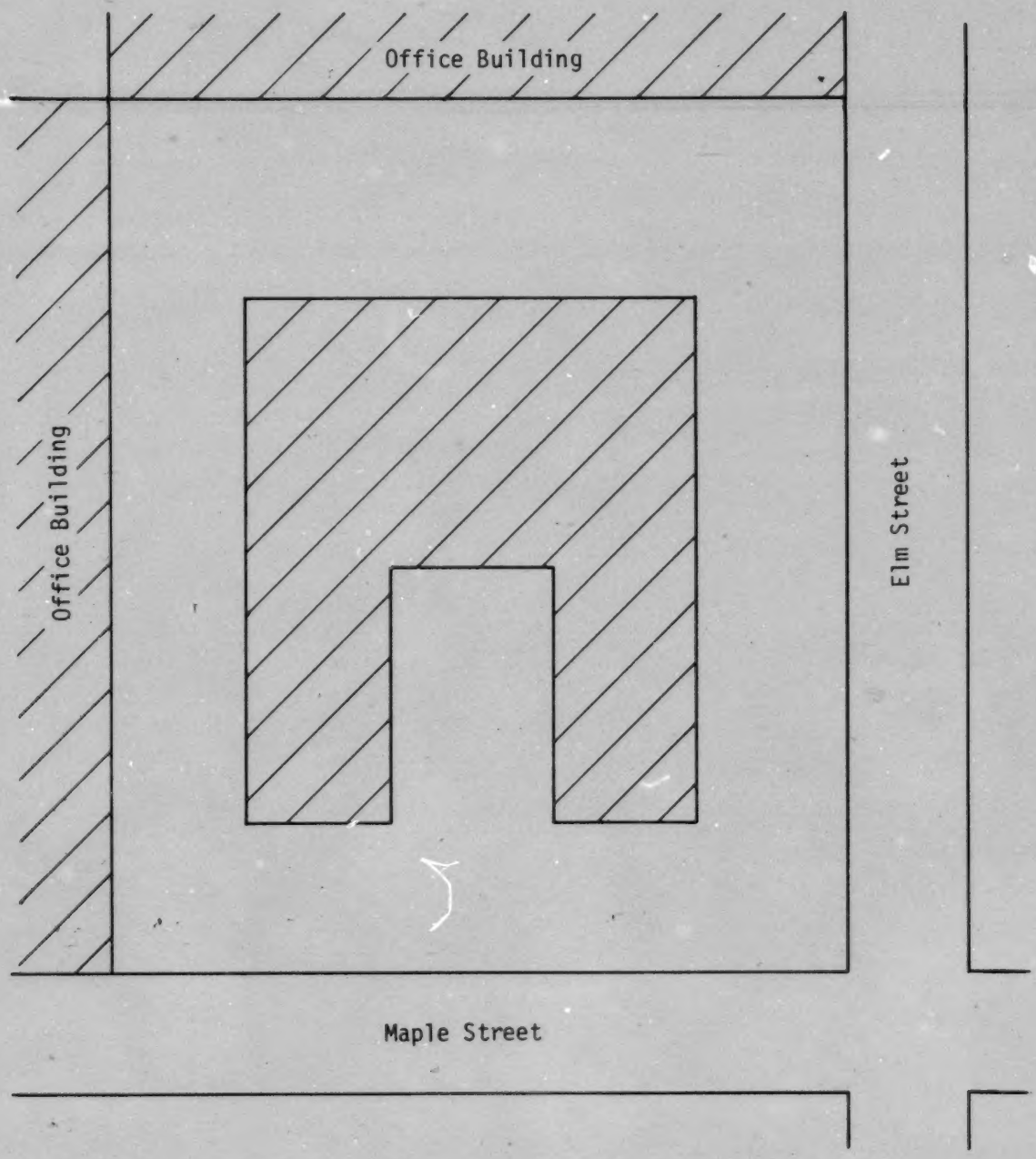
Find out the following information about one house or building and fill out the chart below. You may wish to use a building that is under construction at the present time.

Building: _____

Number of families in the building	
Zoning	
Size	
Location from road	
Foundation materials	
Roof material	
Wall construction	
Plumbing construction	
Electrical wiring	

INDIVIDUAL STUDENT ACTIVITY

Landscape architects make buildings, highways, parks and recreation areas attractive. How would you landscape the building shown? It will be the new city library.



INDIVIDUAL STUDENT ACTIVITY

On the graph paper reproduced on the next page, make a floor plan of a one-story elementary school to scale (1/16" = 1 foot). On the graph paper, you will notice that every tenth foot has been accentuated. Include:

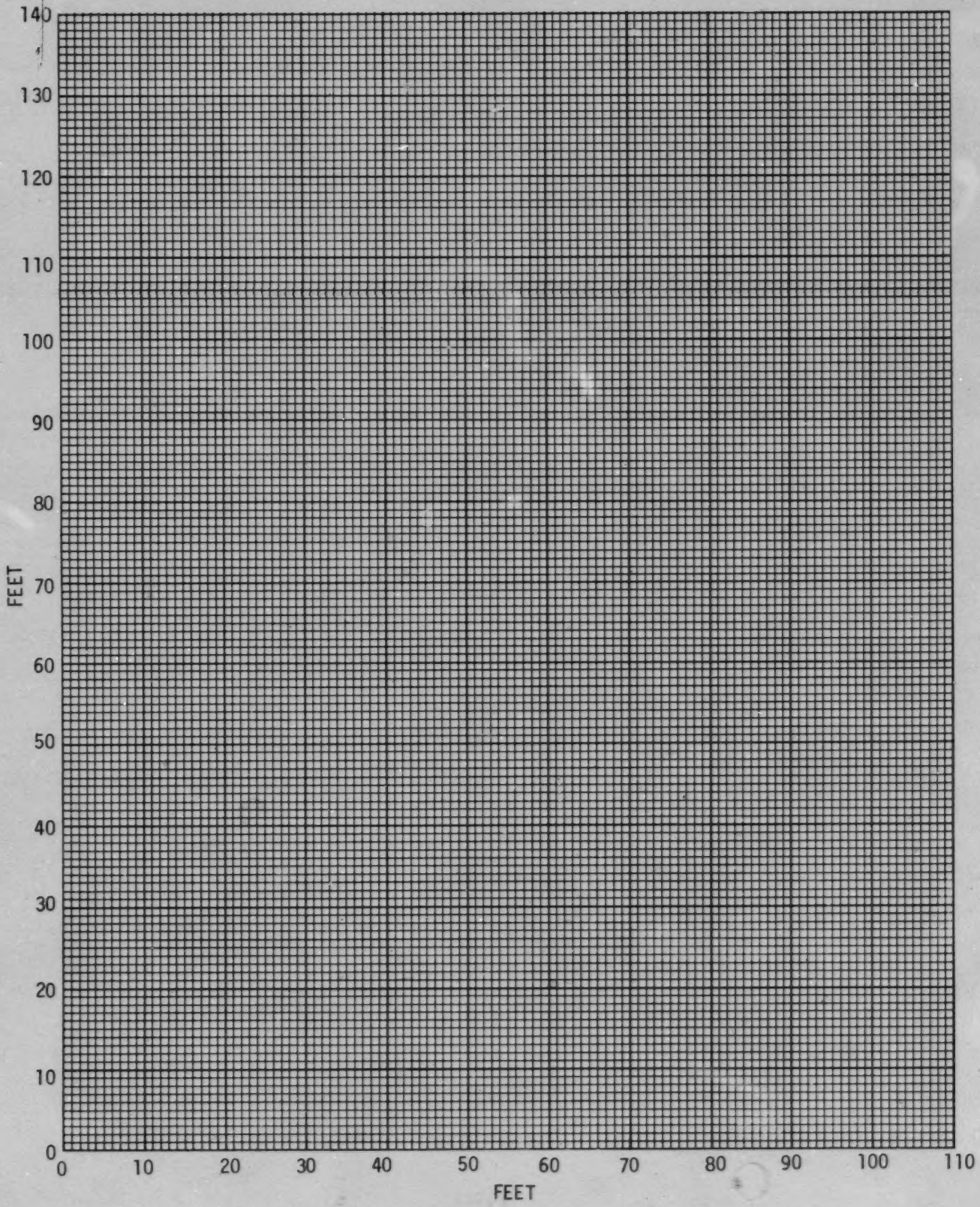
- 12 classrooms (for 30 children each) of 900 square feet each.
- Halls 10 feet wide.
- A media center, gymnasium, cafeteria with kitchen, office nurse's office, individual rooms for music, speech therapy, and reading difficulties, storage and janitorial areas, and a heating plant.
- One square foot of lavatory area per student.
- Teacher's room and lavatory area for adults.

No point in the building must be more than 100 feet from an outside exit.

After you have completed your drawing, answer these questions.

What is the total area of your school?

If building costs are $35 a square foot, what is the total cost of your building?_____.


140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
FEET
0
10
20
30
40
50
60
70
80
90
100
110
FEET

Unit 13

ENFORCING OUR LAWS

This unit is designed to be presented in
Social Science classes, Grades 7, 8, or 9

Here are the contents of Unit 13 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

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- Investigating Criminal Actions
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Unit 13
ENFORCING OUR LAWS

CONCEPT

PUBLIC SERVANTS PROTECT OUR LIVES AND OUR PROPERTY

INSTRUCTIONAL OBJECTIVES

1. Ability to know the reasons for law enforcement agencies.
2. Ability to list some of the factors that may cause crime.
3. Ability to identify various law enforcement agencies and explain their functions.
4. Ability to list the major jobs in law enforcement and their duties.
5. Ability to explain the qualifications for major jobs in law enforcement.
6. Ability to recognize that people vary in physical characteristics.
7. Ability to recognize that people vary in emotional reactions.
8. Ability to recognize that careers affect life style.
9. Ability to see the importance of interpersonal relations in public service occupations.

CONTENT

Need for Law Enforcement.

Can you imagine what it would be like if you lived in a society that had no laws? What would it be like if people were allowed to steal each other's property, to injure and kill each other at will? The weak and helpless would be left at the mercy of the strong and the cruel. Everyone would

live in fear for their lives and their property. No one would have a sense of well-being.

Societies make laws so that all people will be protected. When laws are broken, all individuals are endangered.

Laws are meaningless if they are not enforced. It would be difficult for every citizen to protect his own life and property. Daily living does not leave each individual enough time to enforce community rules. Protection of lives and property is a twenty-four-hour-a-day job, and the other daily activities performed by the members of the community must also be executed.

Communities once used sheriff's posses and vigilantes to enforce rules. But today these methods are considered unsatisfactory because they depend on untrained people. And too, these methods would be useless in modern day society with its extensive areas that have to be covered. Automobiles, expressways, and airplanes make it easy for the modern-day lawbreaker to commit a crime and get away rapidly. In a complex society such as America is today, new inventions and changing conditions make crime prevention and detection too difficult for untrained and unorganized people to handle.

Why are Laws Broken?

Criminologists are not sure why people break laws. Although many Americans live in affluence, a sizeable part of the American public also, unfortunately, lives in environments of poor housing, poor schools, poverty, and unfavorable social conditions that breed crime.

America today is undergoing massive changes in its philosophical, ethical, and moral structure. Old ways and laws are being challenged daily by people who wish to do things in a different way. This often brings them into conflict with existing laws and regulations.

Other reasons for law breaking could result from the fact that our laws are not uniform in each state. There are two basic types of crimes in the United States, felonies and misdemeanors. Felonies are by far the more serious, and are usually punished much more severely than misdemeanors. Some criminal actions are considered as felonies in some states, and misdemeanors in others. Some actions, such as gambling, are considered legal in some states, while they would be illegal in others. In general, an act is criminal if it is included in the criminal law of the state. However, there are federal laws which every citizen must obey. These include laws against treason, nonpayment of taxes, and kidnapping.

There are many other suggestions offered by criminologists to explain why people break laws. People who are deprived of good homes and jobs often feel hostile toward society and see no reason why they should not break the law for them. Others who feel hostile toward their family, boss, or parents may strike out at innocent people. While some criminologists place the blame on environment, others tend to believe heredity plays a larger part in determining who will break the law.

It is generally agreed, however, that people who are crowded together in slum areas filled with poverty and hopelessness are more apt to commit crimes. On the other hand, crimes committed by white-collar workers, such as embezzlement and fraud, are also increasing rapidly. This leads many people to believe that it is all right to gain wealth by any means. And, of course, there are those who commit crimes strictly for "kicks."

Whatever the reasons may be for crime, people must protect themselves from lawbreakers by strictly enforcing society's laws.

Duties of City or Local Law Enforcement Officers.

Police officers are local government employees whose job is to:

prevent crime,
arrest lawbreakers,
regulate people in noncriminal activities,
perform public duties.

Policemen who work in a small community usually have varied police duties. In a single day, they must direct traffic at the scene of a fire, investigate a housebreaking, and give first aid to an accident victim. In a large police department, officers are usually assigned to a specific duty. Most policemen are on traffic or patrol duty.

Traffic officers enforce laws relating to traffic, parking, vehicles and vehicle operators, and pedestrians. Their main purpose is to keep the community's streets and highways safe. In order to do this, they investigate accidents to see why they happened, and teach drivers how to avoid collisions. Traffic accidents cause the death of over fifty thousand people every year, and hundred of thousands more are injured in traffic accidents. Traffic officers have the added responsibility of regulating the flow of traffic. With the rapid increase of the number of motor vehicles on the road, they must investigate increasingly larger numbers of accidents, and arrest or ticket more violators.

Crimes that must be further investigated are handled by detectives and other groups, such as the "crime laboratory." Detectives investigate the crime, arrest suspected criminals, recover stolen property, and prepare the case for court.

Crimes involving juveniles, too, are on the rise. Although officers try to prevent juvenile delinquency, they must be just as firm in arresting juveniles as they are when they arrest adults. Many times special officers are assigned to work with juvenile offenders. These officers have ability in working with young people and have experience with working with parents.

Patrolmen prevent crimes and arrest persons whom they catch in criminal activities. One of the major reasons for patrol is to convince the would-be criminal that it would be unsafe to break the law. An active patrol cuts down the opportunity for crime to occur. Patrolmen also preserve the peace at public gatherings where disturbances are likely to happen. They answer and dispose of complaints, investigate crimes, and arrest the offenders. They are responsible for preserving evidence and must make reports about the crime. Sometimes patrolmen spend part of their days in court, as they are frequently called upon to testify in court cases.

Investigating Criminal Actions.

The detection of crime and the apprehension of criminals in today's society depends on scientific and thorough investigations. There are three basic types of investigations:

- because of violations of the criminal, traffic, health, and sanitation laws;
- checking the character and background of people to find out whether they may be trusted in responsible positions;
- to determine the conditions or circumstances which cause or may result in crimes.

Policemen gain information from people who may identify the offender; give a description, and indicate the method of escape; tell what was taken and how the incident happened; or offer ideas as to who the guilty person might be.

Objects also provide information which is more reliable than eye witnesses, who are often too emotional to be accurate. Careful examinations of physical changes in the victim and the suspect (such as injuries) can determine the type of weapon used in the crime--it may have been, among others, a gun, a broken bottle, or a chemical. All broken objects, such as windows, doors, headlights, and bumpers, are examined; so

also are objects that are marked or dented. Things which have been moved (such as furniture) and objects that have been destroyed can give valuable clues to the investigator. Materials can be taken by the suspect from the victim. The property of the victim, tools, blood, hair, and clothing fibers, can be transferred from the victim to the suspect. Bullets, tools, paint peels from car accidents, matches, and fingerprints may be left accidentally at the scene. The most important piece of evidence that an investigator can obtain is a fingerprint, because no two fingerprints are alike.

Holding Suspected Violators for Trial.

While suspects are waiting trial, they are placed in jail. Jails are the oldest places of detention. More than one million people pass through the nation's jails every year. Unfortunately, many of our jails are not equipped to handle this large number of people. Complicating this problem is the fact that many people must wait months before their cases can be heard in court, even if they are innocent. This means that those people who can not raise bail (most often the poor) must remain in jail. The jailer must decide what to do with the sick, the insane, the drug addict, and the alcoholic, as well as women and children for whom there are no other facilities. The first offender as well as the hardened criminal must be confined and cared for.

Jailers must see that the accused are held safely and fed adequately, and that the conditions of jail are sanitary. They must be concerned with the safety of the prisoners as well as the safety of the staff.

Other Law Enforcement Groups.

Counties, too, have law enforcement units, usually called Sheriff's Departments. While sheriffs are law enforcement officers, they are required to also collect taxes, provide jurors, and serve divorce papers or eviction notices. These duties are handled, in some localities, by other officers called "marshals."

While most citizens are familiar with local police, there are others who are not as visible who work at the state and federal levels of law enforcement. State Highway Patrolmen or troopers are mainly responsible for safe highway transportation. They make sure that the state's laws are obeyed, and give tickets to violators. As highway patrolmen are often the first to arrive at an accident scene, they call ambulances, give first aid to injured, and direct traffic away from the crash site. They also provide service to motorists who are lost or have

mechanical trouble. State policemen also have crime laboratories which enable them to identify and apprehend criminals. Narcotics bureaus and alcoholic control departments also have statewide jurisdiction.

Federal agencies have no geographic boundaries except the borders of the country. They cooperate with state police and the police of foreign governments as well. The alcohol and tobacco tax special investigators of the Internal Revenue Service track down liquor law violators from the dens of country moonshiners to big city stills. They are responsible for the investigation, detection, and prevention of violations of the liquor, tobacco, and firearms laws.

Narcotic agents have one of the most dangerous jobs in law enforcement--curbing illegal drug and narcotic traffic. They investigate violations and often make raids to arrest the violators and seize the drugs. Undercover agents infiltrate the underworld to obtain information about nationwide and international drug traffic.

Secret service agents have two responsibilities:

- They must protect the President and members of his family;
- They are also responsible for detecting counterfeit money and forgery of currency, checks, and bonds of the United States.

The Federal Bureau of Investigation investigates violations of Federal laws and collects evidence in cases in which the United States is an interested party. These involve such crimes as kidnapping, bank robbery, extortion, espionage, and sabotage.

How to Become a Law Enforcement Officer.

Qualifications for jobs in law enforcement vary from one position to another. Narcotic, Internal Revenue, and Secret Service Agents must be college graduates. FBI agents must be law school graduates or college graduates who have majored in accounting.

State and local policemen must be high school graduates. However, police departments are now emphasizing college training. Consequently, many officers are now taking law enforcement courses at colleges and universities. Courses considered helpful in preparing for a police career include English, American history, government, business law, physics, and physical education. Some officers take advanced training in police science, administration, law enforcement, or criminology.

Young people who have graduated from high school can work in some large cities as police cadets, or trainees, while still in their teens. When they reach 21, they may be appointed to the police force. Eligibility is determined by performance in a competitive examination.

Applicants for law enforcement work must pass stiff physical examinations which include strength and ability. They must have excellent hearing and vision, normal color vision, and no physical defects that would keep them from doing their duty. There are weight and height requirements which must be met.

There are other qualifications that police officers must possess. Police officers must be sound mentally as well as physically. They must not have committed any crimes. They must be fair and courteous to all citizens, regardless of race or ancestry.

Before their first assignments, policemen usually go through a period of training. In smaller communities, the instruction is given informally while the recruit works with experienced officers. Extensive training, such as that provided by large departments, may last several weeks or months. During this training, recruits must learn law, civil rights, and procedures relating to accidents, patrol, traffic, and investigations. Recruits also learn how to use a gun, defend themselves, give first aid, and deal with emergencies.

Women in Police Work.

An increasing number of city police departments are using women on their police forces. Policewomen are generally assigned to work with women and young people. They work with juvenile delinquents, locate lost children and runaways, and cooperate with parents, social agencies, and school officials to control delinquency. Policewomen also search, book, and attend to women in jail. They serve warrants, attend hearings, and testify as witnesses in court. They are frequently called upon to address community organizations on police matters.

The role of the policewoman is changing. More and more communities are using women on regular patrol duty where they are expected to apprehend and arrest male and female violators.

Organization of Police Departments.

Police departments today are highly organized. Patrolmen are supervised by Sergeants. Desk Lieutenants usually are in charge of communications. Some smaller departments do not

have Sergeants, but have Lieutenants who supervise the men and do administrative duties.

The Captains are above the Lieutenants, and are usually in charge of a region, such as a station or a precinct. Larger departments may have Inspectors, who are in charge of police functions such as patrol, training, or records. The Deputy Commissioner or Deputy Chief of Police, as he is sometimes called, runs the Department in the absence of the Chief of Police, which is the highest rank of the Department. The Commissioner or Chief sets the policy for the Department, and is responsible for all its activities.

Crime - A Serious Problem.

Many people feel that crime in the United States is increasing rapidly. Some see it as our major problem. The cost of crime in our communities is staggering. Although we depend on public-service workers to enforce our laws, the prevention of crime is the responsibility of every citizen. When one person is robbed, injured, or killed, the well-being of everyone is threatened.

TEACHER MANAGEMENT ACTIVITIES

- Discuss the need for rules at home, in school, and in games.
- Ask students to list rules that protect our lives and property.
- Demonstrate how we depend on law enforcement officers by dividing the population of your local community by the number of local law enforcement officers.
- Demonstrate how citizens depend on police officers by dividing the area of your community by the number of officers that serve it.
- Ask students to collect newspaper clippings about law violations and state which law was broken.
- Divide the class into small groups and ask each group to research and report on one of the following:

  Police training,
  Police organization,
  Police duties,
  Modern methods of controlling and preventing crime.
- Assign students to write a science-fiction account of police work in the future.
- Arrange for law-enforcement officers to visit the class.

- Arrange for students to visit local police facilities.

- Arrange for five students to walk through the classroom doing an activity with an object. After the last student has walked through, ask the students to describe the person, activity, and object of each person who walked through.

- Arrange for students to observe the handwriting of everyone in the class. Put papers without names on the board and ask students to identify the person who wrote each paper.

- Discuss the individual student activity concerning the characteristics of good policemen. Although each question should be answered "no," allow for differences of opinion as different circumstances can cause varying types of reaction.

RESOURCES

BOOKS:

Hello, World, Public Services, Field Educational Corp., 1973.

Crime and Punishment, Franklin Watts, 1969.

Crime and Punishment, Simon and Schuster, 1969.

Crimes and Justice, Houghton Mifflin, 1970.

Crime and Juvenile Delinquency, Simon and Schuster, 1969.

Youth and the Law, Houghton Mifflin, 1970.

Poverty and the Law, Houghton Mifflin, 1970.

Challenges In Our Changing Urban Society, Laidlaw Brothers, 1969.

Your Highway Patrol Career, California Highway Patrol, 1969.

The FBI Story, Simon and Schuster, 1969.

FBI, The "G Man's" Weapons and Tactics for Combating Crime, Putnam's Sons, 1969.

FILMSTRIP:

Crime - Everybody's Problem, Wayne State University, (black and white), 1969.

Law and Order in a Troubled America, Key Productions, (color), 1969.

You and the Law (Parts 2), Harcourt Brace Jovanovich, (color, sound, purchase), 1969.

You and the Law, Guidance Associates of Pleasantville: Discussion Guide, 1972.

The Policeman's Career, Visual Education, (black and white), 1969.

Federal Courts and Law Enforcement, McGraw-Hill, (black and white, purchase), 1969.

FILMS:

Police Power and Freedom of Assembly: The Gregory March, Henk Newenhouse/Novo, (7 min., black and white, purchase), 1970.

The Police and the Community: Respect for Each Other, Dibie-Dash, (24 min., color, purchase), 1969.

The People's Right to Know: The Police vs. Reporters, Henk Newenhouse/Novo, (12 min., black and white, purchase), 1970.

Super Cop, NBC Educational Enterprises, (25 min., color, purchase, or rental), 1970.

Police Unit 2A 26, American Educational Films, (18 min., color, purchase or rental), 1972.

Story of a Policeman, David L. Wolper Productions, (25 min., black and white, purchase), 1971.

The Story of a Policeman, Sterling Educational Films, (black and white, purchase), 1965.

The Paperhangers, Highway Safety Foundation, (color, sound, purchase), 1969.

The Shoplifter, Highway Safety Foundation, (color, sound, purchase), 1969.

Booked for Safekeeping, U. S. National AV Center, (33 min., black and white, purchase), 1969.

The Traffic Officer in Court, American Mutual Insurance, (10 min., black and white, purchase), 1969.

Justice Delayed, Justice Denied, Carousel Films, (40 min., black and white, purchase), 1972.

INDIVIDUAL STUDENT ACTIVITY

Jane Roberts was a seventh grader. She lives with her mother, stepfather, and half-sister. Jane felt that her sister was the favorite child of her parents.

Jane's family had just moved into the neighborhood. Sam Johnson Junior High School has 1,000 students. Jane felt lonesome because she did not know any of her schoolmates well.

The work at Sam Johnson was very hard, so Jane was not sure she could get average grades.

Finally a group of girls noticed Jane. Jane was flattered to be in the group because she felt the girls in the group were better looking and better dressed than she was. They lived in the better part of the neighborhood, too.

Jane's new group of friends liked to shoplift for kicks. But the first time Jane tried to shoplift, she was caught.

What do you think caused Jane to break the law?

INDIVIDUAL STUDENT ACTIVITY:

What makes a good police officer? Check "yes" beside each statement that you agree with, and "no" beside each statement with which you disagree.

YES	NO	
____	____	1. A police officer should seldom smile, so that people can see that he is firm.
____	____	2. It is not important if a police officer's grammar is poor.
____	____	3. Police officers should do most of the talking when they stop people.
____	____	4. When suspects become violent, it is all right for the policeman to use foul language.
____	____	5. When stopping teenagers, officers should remember to treat them like delinquents.
____	____	6. It is not necessary for policemen to be neat in this day and age.
____	____	7. When officers are off duty, they can drive anyway they wish.
____	____	8. Officers should use teenage language when talking to young people.
____	____	9. When a young person uses wisecracks, the officer should use them, too.
____	____	10. The best police officers use sarcasm often.
____	____	11. It is best to hit the suspect, then talk later.
____	____	12. Officers should be harder on minority-group members because they are dangerous.
____	____	13. People who are good natured make poor policemen.
____	____	14. It is not ncessary for a policeman to be intelligent.
____	____	15. Policemen should not arrest important people who have broken the law.
____	____	16. People who feel sorry for people in trouble should not become police officers.
____	____	17. It is not important if officers are dishonest when they are off duty.
____	____	18. Police officers should not enforce laws they feel are bad.

Answer Key:

See last Teacher Management Activity on page 181.

INDIVIDUAL STUDENT ACTIVITY

Careers affect one's life style.

Police officers work on weekends, holidays, and at night, as well as during the day. They work on rotating shifts, but can be called anytime they are needed. Many officers work 10 hours a day for 4 days only during a week. However, in emergencies they may work overtime.

How would this schedule affect:

(1) Sleeping Hours _____

_____

(2) Meal Times _____

_____

(3) Joining a bowling league _____

_____

(4) Going to church _____

_____

(5) Family outings _____

_____

(6) Watching favorite TV shows _____

_____

(7) Friendships _____

_____

INDIVIDUAL STUDENT ACTIVITY

Some people are more emotional than others. Could you:	YES	NO
1. Stay calm when others are upset?	____	____
2. Be called foul names without losing your temper?	____	____
3. Chase a criminal at high speeds?	____	____
4. Arrest a nine-year-old?	____	____
5. Explain to parents that their child has committed a crime?	____	____
6. Go after a hardened criminal in a dark alley?	____	____
7. Handle dead or injured people who've been in accidents?	____	____
8. Tell a wife that her husband has been killed?	____	____
9. Work undercover to break up a drug raid?	____	____
10. Shoot a person who has committed a crime and is trying to escape?	____	____
11. Take an eight-year-old to Juvenile Hall?	____	____

Unit 14

CORRECTING THE GUILTY

This unit is designed to be taught in
Social Science Classes, Grades 7, 8, or 9

Here are the contents of Unit 14 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

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- Our Rights
- Our Courts
- Trying a Court Case
- One Result - Probation
- Another Result - Correctional Institutions
- Punishment - or Rehabilitation
- Learning in Prison
- Learning by Working in Prison
- The End Result - Parole

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Unit 14
CORRECTING THE GUILTY

CONCEPT — PUBLIC SERVANTS PROTECT OUR LIVES AND OUR PROPERTY

INSTRUCTIONAL OBJECTIVES

1. Ability to compare and contrast the jobs of workers in justice system.
2. Ability to describe the past and present concepts of justice.
3. Ability to compare and contrast the duties of workers in the correctional system.
4. Ability to understand that people differ in their ways of handling problems.
5. Ability to evaluate the effects of different solutions to problems.
6. Ability to match individual interests and abilities to skills needed in this field.

CONTENT

Our Rights.

American citizens, fortunately, have certain rights which are guaranteed under the Constitution, which is the highest law in our land. Every citizen has the right

to a trial by jury;
to have a fair trial;
to be free from unjust arrest.

All persons are presumed to be innocent until they are proven guilty, and everything must be done according to law. People

who have been tried and found innocent of a crime cannot be tried for that offense again. All persons accused of crimes have a right to a speedy trial. They must be informed of the charges against them, and they have the right to have counsel (a lawyer) represent them at all times, except before grand juries. Public defenders are lawyers who are appointed by the court to represent people who are unable to hire private lawyers.

Our Courts.

Courts may be divided into the broad divisions of Civil, Criminal, Traffic, and Small Claims. Civil disputes are between two people who disagree about their rights, as in a contract. Criminal law involves lawbreakers who have committed minor crimes (misdemeanors) or major crimes (felonies). In a small claims court, the amount of money involved is not great and the judge decides the case.

Public-service workers perform many duties that are necessary to run our system of justice fairly and efficiently. Police officers serve as court officers or bailiffs. Their duties include the maintenance of order in the courtrooms, and assistance in the operation of courts. Clerk typists may file complaints, handle motions for new trials, prepare abstracts of cases, and collect traffic fines. Legal secretaries take dictation, prepare court calendars, and perform duties for judges. Clerk typists can become deputy clerks, senior duty clerks, courtroom clerks, assistant administrators, and administrators. Administrators handle the setting of trials. The highest step is the Clerk of the Court, who works as a secretary for the judges; swears in witnesses; marks exhibits; and prepares minutes of the trials.

Trying a Court Case.

During the trial, the prosecutor tries to persuade the jury that the defendant is guilty. The prosecutor is a member of the District Attorney's staff.

If the defendant is found guilty, a Probation Officer conducts an investigation to determine whether there are factors that should be considered before the defendant is sentenced. Probation officers interview the victim, the arresting officer, the offender, the family, employer, and teachers to determine if the offense is likely to happen again. After preparing a social history of the offender, they recommend to the Judge whether the offender should go to the State Prison, County Jail, Youth Authority, Forestry Camp, or be placed on probation.

One Result - Probation.

Judges may decide to place offenders on probation instead of requiring them to spend time in jail or prison. Probation officers supervise the welfare and conduct of adults and juveniles on probation. Probation officers tell the families of offenders where they can receive help and locate foster homes for juveniles if they are needed. They try to assist offenders in solving their emotional and social problems, and keep in touch with them to see if progress is being made. When offenders have made enough progress, they are released from probation.

The requirements for Probation Officer are, normally, graduation from college, preferably in the social sciences, and one year of experience in probation, parole, or social work.

Another Result - Correctional Institutions.

Not every offender, of course, receives probation. Some must go to correctional institutions. There are at least 7,500 correctional agencies in the United States, some 800 of which were designed for juveniles.

Juvenile Centers. Counselors at juvenile centers train and supervise the wards in their daily activities, give individual and group counseling, and decide on the appropriate treatment for each offender. They must be able to gain the interest, respect, and cooperation of their wards, and maintain fair and firm discipline. Usually, counselors must have any combination of training and experience equivalent to three years of college, preferably in the social sciences.

People who have completed high school and have suitable work experience can sometimes obtain jobs where they will be responsible for the custody and supervision of boys and girls in detention halls.

Prisons. There are twenty-eight prisons and eight community treatment centers run by the Federal Bureau of Prisons for people who have broken federal laws. Each state has a Department of Corrections, which manages a state prison system. The state may also operate a facility for committed narcotic addicts and a center for the criminally insane.

Punishment - or Rehabilitation.

Long ago, the main purposes of prisons were to remove criminals from society so that they could not commit more crimes, and to punish criminals physically and mentally so they would not want to commit crimes again. Inmates lived in isolation,

each confined to a single cell, having contact only with ministers, guards, and prisoner reformers. Although prisoners worked and ate together, they were forbidden to talk, since silence was a part of the punishment. Physical abuse, flogging, sweatboxes, balls and chains, were common procedure. Hard and disagreeable work was assigned to prisoners, and if there was no work, the prisoners worked a useless treadmill.

People began to see that imprisonment itself is punishment. Inmates lose their privacy, freedom to make decisions, companionship of friends and family, self-respect, and their freedom to go where they wish. Finally, punishments such as flogging, total isolation, and silence were removed from prisons.

While the responsibility of prisons today is to keep offenders safe and secure, the emphasis today is no longer on punishment. In many institutions, programs of treatment are designed to help each inmate become prepared to take his place in free society.

Today's correctional officers are generally not tough, club-swinging individuals. They are usually part custodial officers and part counselors. Correctional officers, working on shifts, must supervise buildings containing hundreds of cells. The duties of an officer are numerous and varied, ranging from the supervision of inmates at work, recreation, and meals, to participation in group counseling and group treatment programs. Officers must maintain adequate standards of security and cleanliness for their areas. They must enforce the rules and regulations of the institution.

High school graduates who have 2-4 years of related work experience can qualify as correctional officers. College training can often be substituted for the required experience.

Learning in Prison.

Many inmates sent to correctional institutions cannot read and write. To help them overcome this, the Corrections Department may hire teachers who instruct in grade school, high school, and college level courses.

Many people in prison do not have job skills with which to earn an honest living. The Department of Corrections may offer a wide range of vocational training programs. These courses may include:

aircraft engine repair	drafting	office machine repair
auto body repair	drycleaning	painting
auto mechanics	dental laboratory work	plastering
baking	graphic arts	plumbing
bookbinding	janitorial service	upholstery
carpentry	masonry	vocational nursing
cooking	meat cutting	welding

These classes are instructed by public service workers who have years of on-the-job experience in these fields.

Correctional counselors interview and counsel inmates and try to help them solve their problems.

Learning by Working in Prison.

Some correctional institutions now operate industrial and agricultural enterprises. Manufacturing plants may produce wood and metal furniture, clothing, shoes, detergents, and flags. All of the state's license plates may be manufactured by inmates. Inmates also run canneries, dairies, and laundries.

Some states have a work-furlough program in which inmates receive enough money to pay for their room and board, send money to their families, and save toward the day they will be paroled. In some cases inmates are now given short leaves to their communities to prepare for their return to society.

The End Result - Parole.

Parole agents are responsible for helping parolees return to a law abiding role. They must supervise the parolee's activities and make sure rules are being obeyed. Parolees are usually expected to obey curfews, report to their parole agents, and avoid criminals or ex-criminals. The parole agent

- helps parolees with personal problems;
- aids in job placement;
- works with social, religious, and recreational agencies concerned with rehabilitation;
- observes the parolee to detect anything which might lead to a new crime.

Parole officers are college graduates who have usually majored in social sciences, and have had experience in probation, parole, or social work.

Although offenders are placed in correctional institutions to keep them from harming others, public-service workers strive to prepare offenders vocationally, academically, physically, and psychologically so that they may reenter society as law-abiding citizens.

TEACHER MANAGEMENT ACTIVITIES

- Have students list the most common problems junior high students have.
- Discuss possible ways of handling the problems listed above.
- List the counseling agencies that offer services to your community.
- Discuss the cases in the individual student activities. Solutions to the problems will vary.
- Ask each student to list five things he likes about himself.
- Ask each student to write about one behavior pattern he would like to change. Papers need not be collected.
- Discuss the results of the survey on jobs for parolees.
- Arrange for visits from resource people in the judicial and correctional fields.
- Arrange a field trip to a nearby courthouse.
- Have class simulate a trial court in class.

RESOURCES

BOOKS:

This Is America's Story, Houghton Mifflin, 1970.

The Challenge of American Democracy, Allyn and Bacon, 1970.

The Bill of Rights, Coronet Films, 1969.

Human Rights: The American Scene, John Wiley and Sons, 1969.

The Story of the Law, Simon and Schuster, 1969.

Liberty and the Law, Prentice-Hall, 1969.

Liberty and the Law: Free Press--Fair Trial, Unit 5, Prentice-Hall, 1969.

Liberty and the Law: Search and Seizure, Unit 3, Prentice-Hall, 1969.

Liberty and the Law: The Privilege Against Self-Incrimination, Unit 2, Prentice-Hall, 1969.

Liberty and the Law: The Right to Counsel, Unit 1, Prentice-Hall, 1969.

How to Keep Out of Jail, Franklin Watts, 1966.

Crime and Punishment, Franklin Watts, 1969.

Rights of the Accused: Criminal Procedure and Public Security, American Education Publications, 1971.

Crimes and Justice, Houghton Mifflin, 1970.

Youth and the Law, Houghton Mifflin, 1970.

FILMSTRIPS:

Liberty and Its Responsibilities, Universal Education and Visual Art, color.

You and Self-Government, Filmstrip House, (color, purchase), 1970.

The Federal Courts, Encyclopedia Britannica, (color, purchase), 1969.

Federal Judiciary, Society for Visual Education, (color, purchase), 1969.

FILMS:

Justice Under Law - The Gideon Case, Encyclopedia Britannica, (23 min., color, purchase), 1969.

The Bill of Rights in Action - The Story of a Trial, Bailey Film Associates, (22 min., black and white, or color, purchase), 1969.

Interrogation and Counsel, Churchill Films, (22 min., color, purchase), 1970.

Basic Court Procedures, Coronet, (14 min., black and white, or color), 1970.

Institutions, Progressive Picture, (21 min., black and white, purchase), 1969.

Voices Inside, NBC Educational, (22 min., color, purchase), 1970.

TRANSPARENCY:

Crime and Punishment, Creative Visuals, 1969.

KIT:

Elizabeth Fry and Prison Reform, E. M. Hale, 1970.

CHART:

Agencies of Justice and Law, George A. Pflaum, 1970.

INDIVIDUAL STUDENT ACTIVITY

It is normal for people to feel emotions. Anger, joy, sadness, nervousness, and frustration should not always be held in. People vary in the ways that make them feel better.

1. What things make you feel nervous? _____

_____

What do you do when you are nervous? _____

_____

2. Name three things that make you feel unhappy. _____

_____

What do you do when you are unhappy? _____

_____

3. Name three things that make you confused. _____

_____

What do you do when you are confused? _____

_____

4. What things make you feel angry? _____

_____

What things do you do when you are angry? _____

_____

INDIVIDUAL STUDENT ACTIVITY

People who counsel troubled individuals try to understand why certain behavior patterns develop. Why do you think the following people behave the way they do?

- Tom enjoys doing new things. He is always in search of a new adventure. Tom believes in trying as many things as possible. He often brags to his friends that he had tried just about everything. Tom is now in Juvenile Hall for using marijuana.

- Many students at Jane's school look down on people they consider "square." Jane does not like the taste of alcohol, but she drinks anyway to feel she is a part of the group. Jane was arrested for being drunk in public and is now on probation.

- Linda feels like an outsider at her school. She just can't seem to make friends. When she is with a group of girls, she always talks about how many nice things she has, how much money her family has, and how smart she is. Linda is very unhappy because she is so unpopular.

- Denny lives in a rundown neighborhood. He is always hungry and a little sick. With five children in the family, Denny's parents cannot afford to buy clothes for him. Denny picks fights constantly and bullies small children.

- Jack's father wants him to be a lawyer like himself. He decides what courses Jack should take, but Jack gets poor grades in them. Jack's real interest is in art. Jack has now refused to bathe, comb his hair, or keep his room neat. He dresses as sloppily as he can and cuts classes often.

- Mary's parents do not have much time for her. They are involved in many activities. Mary's parents expect she will fail. Mary is rude in class. She cuts class often and does not try to do well.

INDIVIDUAL STUDENT ACTIVITY

The actions of one person often affects the actions and feelings of other people. There is always more than one way to act in a situation. Each choice has its disadvantages or advantages. Some people choose behavior that hurts them, their families, their friends, and society. Can you think of some other things the following people could have done?

- Josie's parents argued every night. Their arguing made Josie very unhappy. Josie finally ran away from home.

- Terry's parents always took her little brother's side. The last time this happened, Terry threw a vase at her little brother and seriously injured him.

- Larry is unhappy about his grades. He would like to get average grades, but he usually gets D's and F's. He thinks studying is for "squares." Larry feels the teacher and principal are against him. Larry broke into the school and ruined all of the school's A-V equipment.

INDIVIDUAL STUDENT ACTIVITY

Qualifications for workers in corrections vary. Fill in the information below.

Correctional Officer	Probation Officer
Education:	Education:
Duties:	Duties:
Salary:	Salary:
Parole Officer	**Supervisor of Juvenile Hall**
Education:	Education:
Duties:	Duties:
Salary:	Salary:

INDIVIDUAL STUDENT ACTIVITY:

Parole officers try to find jobs for people who have police records. Ask three employers if they would hire people who have been convicted of murder, theft, drug abuse, or have a history of alcohol abuse. Ask them to give honest answers. You are not judging if they are right or wrong.

Employer #1	YES	NO
Murder	_____	_____
Theft	_____	_____
Drug Abuse	_____	_____
Alcohol Abuse	_____	_____

Any Comments: _____

Employer #2	YES	NO
Murder	_____	_____
Theft	_____	_____
Drug Abuse	_____	_____
Alcohol Abuse	_____	_____

Any Comments: _____

Employer #3	YES	NO
Murder	_____	_____
Theft	_____	_____
Durg Abuse	_____	_____
Alcohol Abuse	_____	_____

Any Comments: _____

Unit 15

PREVENTING AND FIGHTING FIRES

This unit is designed to be taught in
Social Science, Physical Education, or Health Classes,
Grades 7, 8, or 9

Here are the contents of Unit 15 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

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Functions of Firefighting Personnel

Qualifications for Firefighters

The Future for the Firefighter

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Unit 15

PREVENTING AND FIGHTING FIRES

CONCEPT

PUBLIC SERVICE WORKERS PROTECT OUR LIVES AND OUR PROPERTY

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the major functions of workers in fire safety.
2. Ability to list the recommended qualifications for fire safety.
3. Ability to discuss possible functions for fire-fighting in the future.
4. Ability to recognize that physical traits affect career choice.
5. Ability to recognize that social and personal relationships affect careers.

CONTENT

Protecting lives and property from fire is one of the major duties performed by public-service workers. Years ago, community residents formed lines, with each person passing a bucket of water forward to put out the fire. Today the bucket brigade has disappeared.

Firefighting today has become highly specialized and sophisticated. Firemen are usually full-time paid employees of county or town fire departments. In small towns and communities fire departments are maintained partly by paid "call men," or volunteer firemen, who serve only when they are needed at a fire.

Functions of Firefighting Personnel.

In fire protection, the entry level job is usually as a fire-

fighter or a fire dispatcher. The fire dispatcher receives emergency alarms, dispatches proper equipment to the emergency, keeps records, and calls other emergency agencies if their help is needed.

Firemen respond to alarms, suppress fires, rescue endangered people, and protect and salvage property. Each fireman has a specific task to perform. While they must be able to follow the directions of the commanding officer, they must also be capable of making good split-second decisions on their own. Usually, firemen advance to fire-control mechanic, fire control technician, Lieutenant, Captain, Battalion Chief, Assistant Chief, and Fire Chief.

In waterfront cities, firemen assigned to fireboats respond to alarms, suppress fires, and rescue people in danger. Fireboat mates operate small fireboats and steer them to and from the scene of fires, while fireboat pilots command larger fireboats.

In some of the larger cities, helicopter pilots fly helicopters to fires. They rescue men and equipment, and may drop chemicals or water on fires to suppress them. Real or potential fire hazards can be spotted in the air by helicopter pilots.

Fire prevention engineers are responsible for the design and installation of fire prevention systems, industrial equipment, and plant buildings. They design and inspect alarm systems, sprinkler systems, and detection devices. They also analyze building drawings to determine whether the buildings meet the minimum standards of fire safety.

Specially trained firemen periodically inspect factories, theatres, and other public buildings for conditions which might cause a fire. Local laws on fire escapes, fire doors, storage of flammable materials, and other hazards must be complied with.

Arson investigators determine the nature and causes of fires. They collect, preserve, and analyze evidence; they interrogate witnesses and suspects. Arson investigators file reports, prepare cases, and may testify in court.

Some cities now utilize paramedics, who are assigned to special mobile heart units, and administer advanced medical treatment to heart-attack victims on the scene and enroute to the hospital.

Qualifications for Firefighters.

Physical Ability. Because of the hazardous physical duties a fireman must perform, there are strict entry qualifications

which must be met for employment. A firefighter should be in good health and should be able to pass a physical agility test, which includes such feats as climbing a 40 or 50-foot ladder, doing chin-ups and push-ups, making a standing jump, and running a specified distance. Most departments have height and weight schedules, and good hearing, vision, and color discernment are required.

Education. The fire recruit must have a high school diploma, and, in a growing number of communities, the degree of associate of arts is required. Many areas pay firemen to return to the classroom. Pay increases are sometimes linked to the number of college credits earned.

A fire department whose officers and men are not trained properly cannot protect the citizens of the community effectively. Firefighting depends on adequate fire streams and the proper handling of hoses. Firemen study hydraulics to know heat flow, and to understand pressure and the intelligent use of water. The training of firemen includes the chemistry of fire-ignition temperature, the effects of humidity, extinguishing fires, and explosions. They must be able to handle all types of fire apparatus and equipment: pump and tank trucks, hose trucks, elevating platforms, and chemical trucks. Proper ways of forcing entry and ventilation control must be learned.

In addition, the correct procedures for salvage after fires, and removing debris and water from the building, are a part of a fireman's training. Firemen must be informed regarding the hazards created by a vast number of new materials and products that are passing through or being stored in the community. They must know how to carry victims to a safe place and how to render essential first aid. Building construction and building code laws which are related to fire prevention must be learned. Courses in chemistry, physics, and mechanical engineering are important in preparing for a career in fire science.

Personal Relations. There are other attributes that are essential to a fire service career. Courage, personal development, and mental soundness are all important qualities a fireman should possess. Firemen are often on duty for a 24-hour shift, and then off for 24 hours, plus an extra day at intervals. Since firefighters must live and work closely together, care is taken to select only those who have good personal and social behavior.

The Future for the Firefighter.

The outlook for employment in fire protection is good. As communities continue to grow, so will the need for fire protection personnel. This is apparent, since despite all of

our technological advances, our property losses and fire death rates remain exceedingly high. In 1968 property losses due to fires were a staggering 2 billion dollars. In 1965, our fire deaths numbered 12,000 people, a higher death rate than that of Canada, the United Kingdom, and Japan.

As the population increases, it is therefore expected that many areas which now depend upon volunteer fire units will find it necessary to employ full-time professional firemen.

The fireman of the future will probably be involved more with inspection and fire-prevention activities. Firefighting will change as new materials are used for construction and as different fuels and chemicals are used in industry. New types of equipment installed in homes and buildings will cause firefighting techniques to change. Problems and challenges for fire fighting will also increase as more and more high-rise buildings are constructed.

Firefighting involves great risk of life or injury from sudden cave-ins of floors; toppling walls; exposure to fumes and smoke; bad weather; exposure to poisonous, flammable, and explosive gases and chemicals. Yet, the desire of these dedicated public servants to serve their communities surpasses their fear of death. Perhaps this is why the symbol of a fireman is the public service emblem.

TEACHER MANAGEMENT ACTIVITIES

- Arrange for a visit by a local firefighter.
- Have students visit a local firefighting agency.
- Have students plan and develop bulletin boards on fire safety.
- Ask each student to prepare and give a five-minute talk on fire safety.
- Discuss the general operation of fire agencies.
- Test the physical fitness of each student. Use the seven-item *AAHPER Youth Fitness Test Norms*, which may be obtained from NEA Publication-Sales, 1201 Sixteenth Street, N.W., Washington, D. C. 20036. The single-copy price is $1.00.
- Give students the opportunity to participate in the *Presidential Awards for Physical Fitness*. Applications may be obtained by writing to Presidential Physical Fitness Awards, 1201 Sixteenth Street, N.W., Washington, D. C. 20036.
- Divide class into pairs and ask each pair to demonstrate a life-saving technique--control of bleeding, shock,

resuscitation, etc.

- Discuss high-school courses and nearby college programs that lead to careers in fire science.
- Ask each student to draw a map showing his home and the fire station nearest him.
- Find out and discuss the number of firemen who serve your community, and the size of your community in population and area.
- Ask your principal to discuss what fire inspectors look for when they come to your school.
- Determine the cost of false alarms to your community.
- Ask each student to develop a survival plan for his family.
- Ask each student to tell about personal habits that annoy the student in a home situation. Discuss how these habits would affect firemen who live together. You may wish to role-play situations where firemen have conflicts about neatness, snoring, gum-chewing, etc.

RESOURCES

BOOKS:

Fire, Channing L. Bete, 1969.

Fire Brigades, National Safety Council, 1970.

Firefighting: A New Look in the Old Firehouse, Van Nostrand Reinhold, 1969.

Chicago Fire, October 8, 1871: The Blaze that Nearly Destroyed a City, Franklin Watts, 1969.

Fire Snorkel No. 7, Albert Whitman, 1969.

Smoke Eaters: Trucks, Training and Tolls of the Nation's Firemen, Putnam's Sons, 1969.

School Fires, National Safety Council, 1970.

The House Is On Fire, National Safety Council, 1970.

Home Fire Drills, National Safety Council, 1970.

Planned Fire Escape for Your Family, National Safety Council, 1970.

First Aid for Juniors, Doubleday, 1969.

FILMSTRIPS:

Fire and the Fire Department, Eye Gate House, (sound, color, purchase), 1970.

Causes and Prevention of Fire, Eye Gate House, (sound, color, purchase), 1970.

Fire and Fire Protection, Eye Gate House, (sound, color, purchase), 1970.

Fire and Fire Prevention (Series 9), Eye Gate House, (sound, color, purchase), 1970.

Preventing and Controlling Fire, NASCO, (sound, color, purchase), 1969.

Science and Fire, Eye Gate House, (sound, color, purchase), 1970.

Putting Out Fires and Fire, Education, Eye Gate House, (sound, color, purchase), 1970.

Fire and Fuels, Eye Gate House, (sound, color, purchase), 1970.

Treatment of Wounds, American Gas Association, (sound, color, loan), 1969.

First Aid for Bleeding and Shock, McGraw-Hill, (black and white, purchase), 1969.

Use of Artificial Respiration, McGraw-Hill, (black and white, purchase), 1969.

Artificial Respiration, American Gas Association, (sound, color, loan), 1969.

FILMS:

The Fire Triangle, Bailey-Film Associates, (14 min., black and white or color, purchase), 1969.

Fire Science, Churchill Films, (15 min., black and white or color, purchase), 1970.

Fire: Conditions for Combustion, Rand McNally, (S 8 mm., loop, color), 1970.

Inquiry Science Films (Series 8), Rand McNally, (S 8 mm., loop, color), 1970.

Why, Daddy? Connecticut State Department of Health, (17 min., black and white, loan), 1969.

Object Lesson in Fire Prevention, U. S. National A-V Center, (21 min., black and white, purchase), 1969.

Fire Protection Through Research, Worcester Film, (38 min., color, loan), 1969.

Crew Boss, Serina Press, (35 min., color, loan), 1970.

Smokechaser, Serina Press, (20 min., color, loan), 1970.

Fire and Sand, Serina Press, (10 min., color, loan), 1970.

Fireman At Your Door, Aetna Life and Casualty, (19 min., black and white, free), 1969.

Seconds to Safety, Aetna Life and Casualty, (15 min., color, free), 1969.

Family Fire Safety, American Sheep Producers, (13 min., color, loan), 1969.

Fire Prevention in the Home (Second Edition), Encyclopedia Britannica Educational Corporation, (11 min., color, purchase), 1969.

Are You Safe at Home? Connecticut State Department of Health, (20 min., black and white, loan), 1969.

I'm No Fool With Fire, Walt Disney, (8 min., color, $4.00 rental), 1970.

Forest Fires and You, Serina Press, (15 min., black and white, loan), 1970.

Shape of the Future, Gypsum Association, (14 min., color, loan), 1969.

First Aid Now, Connecticut State Department of Health, (25 min., color, loan), 1969.

Burns (Lesson 7), Connecticut State Department of Health, (13 min., color, loan), 1969.

General Procedure for Shock, Eye Gate House, (S 8 mm., loop), 1970.

To Save a Life, American Gas Association, (16 min., color, loan), 1969.

First Aid: Control of Bleeding, Connecticut State Department of Health, (12 min., black and white, loan), 1969.

Control of Bleeding I and II, Eye Gate House, (S 8 mm., loop), 1970.

Bleeding and Bandaging (Lesson 4), Connecticut State Department of Health, (27 min., color, loan), 1969.

Fractures and Splinting, (Lesson 5), Connecticut State Department of Health, (27 min., color, loan), 1969.

Rescue Breathing, Eye Gate House, (S 8 mm., loop), 1970.

Artificial Respiration (Lesson 3), Connecticut State Department of Health, (13 min., color, loan), 1969.

Mouth to Mouth Resuscitation in Junior High School, Pharmaceutical Manufacturers, (16 min., color, loan), 1969.

KITS:

Alarm System Kit, NASCO, 1969.

Fire Detection Circuit Kit, CENCO Education Aids, 1969.

AUDIO TAPE REEL:

Your Future As a Fireman, Harcourt Brace Jovanovich, 1969.

MULTIMEDIA:

Fire Department Helpers, Society for Visual Education, 1969.

INDIVIDUAL STUDENT ACTIVITY

Are you physically fit? What is your rating in the following events?

Situps	_____	_____
Broad Jump	_____	_____
50-yard Dash	_____	_____
600-yard Run	_____	_____
Soft Ball Throw	_____	_____
Shuttle Run	_____	_____
Pullups (Boys Only)	_____	_____
Flexed Arm Hang	_____	_____

INDIVIDUAL STUDENT ACTIVITY

Do you think you would like a career in fire science? Answer the following questions by checking "yes" or "no."

	YES	NO
1. Are you afraid of heights?	____	____
2. Does traveling at high speeds frighten you?	____	____
3. Are you calm in an emergency?	____	____
4. Can you follow orders well?	____	____
5. Can you make good decisions quickly?	____	____
6. Could you handle the bodies of people who have been burned?	____	____
7. Would you have the courage to enter a smoke-filled building?	____	____
8. Do you get along well with others?	____	____
9. Are you a good team worker?	____	____
10. Can you move quickly in an emergency?	____	____
11. Are you physically strong?	____	____
12. Would you like to take science courses?	____	____
13. Would you risk your life to save the lives of others?	____	____

Unit 16

PROMOTING THE GENERAL WELFARE

This unit is designed to be taught in
Social Science Classes, Grades 7, 8, or 9

Here are the contents of Unit 16 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

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INSTRUCTIONAL OBJECTIVES 217

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- Becoming a Citizen
- Coming Into, or Leaving the Country
- Bringing Material into the Country, or Taking Material Out
- Collection of Money for Bringing Material In

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Unit 16

PROMOTING THE GENERAL WELFARE

CONCEPT

PUBLIC SERVANTS REGULATE THE PASSAGE OF GOODS AND PEOPLE CROSSING OUR NATIONAL BOUNDARIES FOR THE BENEFIT OF ALL

INSTRUCTIONAL OBJECTIVES

1. Ability to list the reasons for regulating international exchange of goods and people.
2. Ability to identify the major job families in this field.
3. Ability to compare and contrast the duties of workers in this field.
4. Ability to discuss the recommended qualifications for workers in this area of regulatory services.
5. Ability to describe the personal abilities, characteristics, and interests of workers in this job family.
6. Ability to recognize that physical traits can affect career choice.
7. Ability to compare own abilities, characteristics, and physical traits to those required for this job family.
8. Ability to recognize that people vary in what is satisfying or non-satisfying to them.

CONTENT

Becoming a Citizen.

The federal government takes many steps to insure the well-being of all its citizens. Consequently, some people are not allowed to become citizens of the U.S. People who seek to become citizens must prove that they are of sound character,

understand American history and government, and will be able to lead satisfying lives in American society. Each person who wishes to become a citizen is examined by the Immigration and Naturalization Service of the Department of Justice. Those who meet the conditions set by the government can become citizens of the United States. These conditions are uniform and must be met by everyone.

Coming Into, or Leaving, the Country.

People who have proved to be undesirable can be deported by the Immigration Service. The Department of Justice also issues passports to Americans who wish to visit foreign countries, and visas and visitors' permits to people who wish to visit the United States.

Immigration Inspectors must inspect all people who wish to pass through or reside in the United States. They may be required to board land, sea, and air carriers to inspect or question people arriving in the United States.

Every year many people seek to enter the United States illegally. The aim of the Immigration Border Patrol is to detect and prevent the smuggling of aliens into this country, and to catch those who have succeeded in entering illegally. Points where aliens can enter are patrolled by automobile, horseback, boat, aircraft, or foot. Patrol agents stop all vehicles that are suspected of bringing aliens into the country; inspect and search trains, buses, airplanes, ships, and terminals; and apprehend all persons seen crossing the border. Although they are generally assigned to border areas, at times they are assigned to areas within the country.

Applicants must pass a written test to become Immigration Inspectors or Border Patrol Agents. People who wish to become Border Patrol Agents should complete the 14-week course of study at the Border Patrol Academy in Los Fresnos, Texas. Classes at the academy include: law, Spanish, care and use of firearms, fingerprinting, judo, methods of tracking law violators, physical training, first aid, and the care and use of government equipment. The basic entrance salary for a Border Patrol Agent is approximately $9,000. Border Patrol Agents can also qualify for Immigration Inspector, a position which pays slightly higher.

Bringing Material into the Country, or Taking Material Out.

Some people try to smuggle illegal goods into the United States, such as heroin and marijuana. Public-service workers seek to

stop all items that would be harmful to the American people.

While smuggling goods has been going on longer than recorded history, the methods, containers, and quantities of smuggled goods have changed. Instead of a few pounds of opium in a camel's stomach, today's smuggler might place heroin in a briefcase or the heel of a shoe. Many clever and new ways of smuggling goods are tried every day.

Customs inspectors are the Government's frontline protection against smuggling. They inspect cargo, baggage, mail, articles worn or carried by persons, and carriers entering and leaving the United States. Customs port investigators inspect airplanes, ships, and boats entering our national boundaries. They are helped in their work by customs agents who cross oceans and continents seeking out those who are attempting to bring in illegal merchandise.

The increase in intercontinental travel has placed added burdens on the Bureau of Customs. In 1966, over 192 million people and 57 million carriers (trucks, planes, ships, and autos) entered the United States. Two hundred fifty million tons of cargo were unloaded at U. S. sea and Great Lakes ports. Two hundred million pounds of cargo arrived at U. S. international airports. The number of air passengers increases at a rate of 10% each year. The Customs Office must adjust constantly to new changes, such as larger and faster aircraft which can carry as many as 500 passengers. Passengers must be cleared, paperwork processed, and duty collected as rapidly as possible.

Exports, too, are inspected by the Bureau of Customs. Exports which will be used to overthrow governments (such as machine guns, mortars, rifles, and ammunition) are seized by customs agents.

Collection of Money for Bringing Material In.

Perhaps the most important reason for customs is the collection of money or revenue. Without revenue, the government would be unable to provide the services that people need. In 1966, customs employees collected over $2.6 billion. Every individual arriving in the United States is of interest to customs. People entering the U. S. are generally entitled to a personal duty-free exemption of $100.00.

Most of the duty that is collected, however, does not come from passengers. Only $25 million was collected from passengers in 1966, which was only 1.4% of the total duty collected.

America is the world's greatest trading nation. In fact, tens of thousands of businesses in the U. S. depend on buying and selling abroad for their income.

Protection of the revenue means making sure that the Government gets the revenue it should, no more, nor no less. There are approximately 300 customs ports in the U.S., each headed by a port or district director.

Articles entering the U. S. must meet certain requirements, such as those relating to pure food and drug laws. Import licenses are required for agricultural products.

Since the collection of revenue must be based on uniform charges, customs value information is coordinated between customs houses. Appraisers examine the merchandise to determine its true value, and if the goods are textiles, furs, or alcoholic beverages, appraisers must make sure they are labeled correctly. Chemists working in customs laboratories determine the origin, manufacture, composition, and use of a wide variety of products. Scientific examinations have been made on candy, molasses, syrups, food products, oils, beverages, clay and earthenware, drugs and narcotics, rubber footwear, chemicals, metals and ores, paper and textiles, petroleum products, and many others.

After the rate of duty and true value is determined, the revenue due must be paid to the Collector of Customs.

As trade and travel have increased, so have investigations, arrests, fines, penalties, and seizures of merchandise. Customs agents patrol the water front, in or out of uniform, often boarding ships before dawn. After the ship's papers have been checked, the ship is thoroughly searched, including the pots, pans, and baking ingredients in the galley, or any other likely hiding place.

Customs Inspectors and Import Specialists need four years of college study in any major field. The Customs Aide position requires two years of college or an A.A. degree. All applicants in this field must be 21 years of age.

There is no way to measure how much public-service workers who are border patrolmen and customs personnel contribute to the well-being of all citizens.

TEACHER MANAGEMENT ACTIVITIES

- Have students collect information and materials on the duties of workers in this occupational group.
- Divide students into small groups and initiate discussion of qualifications required for each major occupation in this field.
- Arrange for a Customs Inspector to be a resource person for your class.

- Simulate the following conditions:

  - Customs and border patrol agents develop a "sixth sense" about who is trying to smuggle goods. They notice mannerisms that tip off a person's feelings.

  - Divide your class into groups. Secretly give each person in the group a marked object. Ask the class to observe each group for a considerable length of time. When the time has ended, ask each person in the class to write down who they feel is the "guilty" party in each group.

- Ask the members of the class how surveillance of other people makes them feel.

RESOURCES

BOOKS:

Should the Golden Door Be Closed? American Book, Van Nostrand, 1969.

Careers With the Immigration and Naturalization Service, U. S. Immigration and Naturalization Service, 1970.

FILMSTRIPS:

Developments Abroad - Immigration, Eye Gate House, (color, sound, purchase), 1970.

New Systems of Business Organizations and the Flood of Immigration, Eye Gate House, (color, sound, purchase), 1970.

The Creation of Modern Industrial America (1870-1920), Society for Visual Education, (color, sound, purchase), 1969.

Population, Eye Gate House, (color, sound, purchase), 1970.

Road to World Power and Responsibility, Society for Visual Education, (color, purchase), 1969.

FILMS:

The Golden Door, B'nai B'rith, (12 min., color, purchase), 1969.

A Nation of Immigrants, B'nai B'rith, (52 min., black and white, free), 1969.

Immigration, Encyclopedia Britannica, (11 min., black and white, purchase), 1969.

Twentieth Century Pilgrim, Serina Press, (15 min., black and white, loan), 1970.

Voyage to America, B'nai B'rith, (12 min., black and white, purchase), 1969.

Arrival of Immigrants at Ellis Island, (1903; 1906) CENCO Education Aids (S 8 mm Loop, 4 min., black and white, purchase), 1970.

The Inheritance, B'nai B'rith, (35 min., black and white, purchase), 1969.

AUDIO TAPE:

Walter, Francis: Philosophy of America's Immigration Policy, EMC Corporation, 1969.

TRANSPARENCIES:

Congress Restricts Immigration, Creative Visuals, 1968.

Immigration in the U. S., Creative Visuals, 1968.

INDIVIDUAL STUDENT ACTIVITY

Border patrol agents must be honest, loyal, intelligent, physically fit, and morally sound. They must have a high respect for law; good oral expression; good personal appearance. They must be excellent in public relations and cannot be drug or alcohol abusers. Their eyesight and hearing must be good (able to hear conversation at 20 feet and whispered conversation at 15 feet). Clear speech and free breathing are required.

Tell why you think these qualifications and characteristics are or are not necessary for a border patrol agent's position.

INDIVIDUAL STUDENT ACTIVITY

Border patrol and customs agents must be very observant. Observe five people whom you do not know well, while they are having free time or engaged in playground activities at your school. After you have observed them for fifteen minutes, leave the area and write a detailed description of each person and what each person was doing. Try not to let the people you are observing become aware that you are observing them.

INDIVIDUAL STUDENT ACTIVITY

Customs Investigators and Border Patrol Agents must make hard decisions. They must penalize everyone who breaks the law, even people they personally like.

School activities can help in making a career choice. If you were the only person who noticed the following people, would you report them to the proper person? Put an (X) beside each person you would report. All of these activities took place at your school.

_____ 1. A boy in your sixth period class stealing the history test from the teacher's desk.

_____ 2. The girl in front of you who passed the answers to the test to the girl across the aisle.

_____ 3. Two boys whom you like who cut their last class.

_____ 4. Three girls smoking in the restroom at school.

_____ 5. A boy giving away a harmful drug.

_____ 6. A girl selling a harmful drug.

_____ 7. A bully taking money from a boy smaller than himself.

_____ 8. Your best friend's book open during a test.

_____ 9. Your best friend taking a dangerous drug.

INDIVIDUAL STUDENT ACTIVITY

Here are some duties that a customs officer might do. Which do you think you would like?

	YES	NO
1. Interviewing people	____	____
2. Questioning people	____	____
3. Doing surveillance	____	____
4. Gathering evidence	____	____
5. Writing detailed reports	____	____
6. Associating with criminals	____	____
7. Patrolling the waterfront	____	____
8. Searching for evidence	____	____
9. Operating undercover	____	____
10. Doing chemical analyses	____	____
11. Appraising merchandise	____	____

Would a job that involves the following be satisfying to you?

1. A large amount of travel	____	____
2. Exposure to all kinds of weather	____	____
3. Hard physical work	____	____
4. Personal danger	____	____
5. Irregular hours	____	____

Unit 17

FAST, SAFE, AND EFFICIENT TRANSPORTATION

This unit is designed to be taught in
Social Science Classes, Grades 7, 8, or 9

Here are the contents of Unit 17 of the Exploration Curriculum Guide. We suggest a careful reading of it before you read the text.

CONCEPT 229

INSTRUCTIONAL OBJECTIVES 229

CONTENT 229

- The Automobile in Transportation
- The Airplane in Transportation
- The Railroad in Transportation
- Public Transportation
- Federal Participation in Highway Traffic Regulation
- Federal Participation in Air Traffic Regulation
- Federal Participation in Railroad Regulation
- The Future Picture

TEACHER MANAGEMENT ACTIVITIES 234

RESOURCES 235

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Unit 17

FAST, SAFE, AND EFFICIENT TRANSPORTATION

CONCEPT

PUBLIC SERVICE WORKERS MANAGE AND REGULATE THE TRANSPORTATION OF PEOPLE AND GOODS

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the major problems in the field of transportation management.
2. Ability to describe the major duties performed by workers in transportation management.
3. Ability to identify the major federal departments concerned with transportation management.
4. Ability to explore the student's own interests in transportation management.

CONTENT

The term "millions on the move" illustrates the transportation problem our nation faces. Not only are millions of people moving about by automobile, bus, train, and plane, but tons of material are being moved by pipeline, truck, freight car, boat, or barge, as well as by air freight. In a recent year, approximately 1 trillion, 750 billion ton-miles* of intercity freight was moved from one place to another. Railroads carry approximately 40% of our freight, mainly heavy materials such as coal, grain, cars, and trucks. Pipelines carry 20% of our freight, mainly oil and gas. Trucks, which are highly mobile, carry some 25% of the nation's freight; water and air transportation carry about 15% of the total. Coal, iron, and ore are often transported by water, while the airlines move much of our light, perishable goods.

*ton-miles = miles of travel times tons of freight; that is, 1000 tons moved 1 mile, or 100 tons moved 10 miles, each equal 1000 ton-miles.

What would happen if our transportation services were to falter for a considerable period of time? The food necessary to feed thousands of people would not flow in, nor would the goods the community produces flow outward to the rest of the nation. The fuel that is needed to move buses, taxes, and automobiles, and to generate power would be shut off. Subways, fire trucks, police cars, and ambulances would be paralyzed.

The Automobile in Transportation.

The American way of life is geared to the automobile and its use for business and social purposes. The automobile provides comfortable, convenient door-to-door service, and most individuals like the independence which a private motor vehicle provides. Consequently, the number of multi-car families increases each year. In 1970, nearly 100 million motor vehicles used our streets and highways. More than a trillion miles are traveled each year, consuming 87 billion gallons of motor vehicle fuel.

The shift of the more affluent population to the suburbs has caused a steady stream of automobiles going to the city in the morning and leaving the city when working hours are over. Many people who attain their dream of owning a home in the suburbs find themselves having an hour's drive to work. Since most Americans like to get to work quickly, many businesses are now beginning to locate their plants away from the city's inner core.

Just as there is a trend for the middle and upper economic groups to move to the suburbs, there is also the trend of movement from rural and urban areas. In the years 1970-80, the total capacity of our transportation system must double if the demand continues at its present rate.

Our transportation problems are not confined to increased mobility. Air pollution, congestion, and noise are also part of the problem. We are being choked to death by the machine we've come to love. Many of our highways and streets were not built to handle the amount of traffic we have today. Consequently, the slow and difficult movement at rush hours is enough to make tempers flare. People who are "rushing" at five miles an hour might be tempted to "get a horse," which can travel over eleven miles an hour.

The Airplane in Transportation.

The problems of transferring from one mode of transportation to another have not been solved. It is not uncommon for people to drive miles to an airport, struggle to find a

parking space, board an airplane, and then circle around their destination unable to land. In many cases, the time spent in getting to the airport is more than the time spent flying to the destination. Many of our airports are located away from the inner city's congested areas, which reduces the hazard of accidents causing a large loss of life. Then, too, airports and runways take up a considerable amount of land, and land located far from the city is less expensive.

Most of our airports are not equipped to handle the volume of air traffic we have today. Many are too small and are poorly located. Residents of areas near airports complain about the constant noise, and many times these homes go down in value.

Inefficiency is also a part of the problem. The passenger today is subjected to costly delays in transferring from one type of travel to another. Baggage frequently arrives late and is lost.

The Railroad in Transportation.

Railroads still play an important role in transportation. As many passengers have shifted to cars and airplanes for transportation, railroads have relied on freight transportation to make profits. Railroads today carry 40% of the nation's freight.

Many people feel that more passengers would use rail transportation if the service would improve. New high-speed trains are now operating in some parts of the country. The federal Office of High Speed Ground Transportation develops systems capable of moving large numbers of people at high speeds with an economical use of space.

Public-service workers design passenger terminals; evaluate and set rates; train and certify operators of transportation systems.

At the state level, people with backgrounds as "right-of-way" agents are much in demand. Right-of-way agents negotiate with property owners to buy the property or obtain the right to use it. During the time between the acquisition of the property and the beginning of construction, right-of-way agents rent the property and see that it is properly maintained.

Public Transportation Systems.

Transit systems are plagued by breakdowns due to unsafe, dirty, and worn-out equipment. People who live on tight schedules

become dissatisfied when transit schedules are not maintained. Vandalism in our terminals has increased to the point where many travelers shun them altogether.

Accidents are taking a costly toll. On our highways alone, over 1,000 people are killed each week, and 10,000 people are injured every day. The economic losses from these accidents exceed one billion dollars a month.

Yet Americans find themselves paying more for less service. Many public transportation companies have been forced to cut back services at the same time they are raising prices to prevent losses from occurring. Some transit companies have gone out of business, while others have had to use public money to continue operation.

Why hasn't the public demanded better public transportation systems? Much of the support for public transit comes from the groups of people who do not drive: the young, the old, the sick, and the poor. People whose needs are met by automobiles are reluctant to pay more taxes for public transportation.

Land is at a premium and there is a reluctance to use available land for transportation. Once land is used for transportation, it cannot be used for another purpose. Highways, roads, bridges, and parking lots can consume up to two-thirds of a city, robbing the city of land that could be taxable property.

Federal Participation in Highway Traffic Regulation.

The federal government plays an important role in ground mobility and safety. Since 1916, it has been a roadbuilding partner with the states. The Federal Highway Administration (FHA) oversees the federal-aid highway network, which comprises over 900,000 miles of roads and highways. Interstate highways, which provide motorists with faster, safer, and more comfortable travel, are a vital part of this system.

The FHA and the states carry on highway safety campaigns to engineer more safety into the highways; to correct dangerous locations; and to introduce new safety ideas. Most new employees of the Federal Highway Administration are college graduates majoring in business, engineering, or accounting.

While the FHA is responsible for the safety of the highways, the National Highway Traffic Safety Administration is responsible for the safety of vehicles, drivers, passengers, and pedestrians. The Safety Administration sets performance standards for motor vehicle inspection; driver education; driver

licensing and registration; alcohol prevention; traffic codes and laws; and emergency medical services. Car manufacturers must comply with more than 30 safety performance standards, such as seat belts and collapsible steering columns. The Safety Administration conducts public education programs on highway safety, and researches accident data to secure information.

The primary responsibility for planning, designing, building, maintaining, and operating public highways belongs to the states and their local subdivisions. Traffic engineers, planners, and civil engineers plan, design, and construct highways, roads, and streets. Traffic engineers watch the flow of people and vehicles and decide where traffic signs, lights, and bike lanes will be located. Many people in this field have college degrees.

Services such as railroads and buses, which move people and freight from one state to another, are called public utilities, and are regulated by the federal government. Therefore, public-service personnel are involved in the regulation of loads to set tariff rates; and in the handling, routing, and movement of dangerous materials.

Federal Participation in Air Traffic Regulation.

Tremendous tasks and challenges face public-service workers in transportation. Their objective is to move people and goods safely, rapidly, and efficiently. Most of the workers in transportation management are employed by the federal government. The federal government takes many steps to insure the safety of all passengers who travel by air.

Air traffic control is the major function of the Federal Aviation Administration (FAA), involving nearly half of its employees. Air traffic controllers direct planes that are landing and taking off from our airports. They view planes on a radar-scope, then direct them to the proper lane for landing or take-off. FAA specialists work in at least 27 air route traffic control centers, 335 airport control towers, and 350 flight service stations. The radar, communication, and ground navigation equipment are maintained by technicians and engineers.

The FAA sets standards to judge the competence of all pilots, and to assess maintenance of all aircraft to make sure they are airworthy. In addition to pilots, the FAA certifies aviation mechanics, parachute riggers, ground instructors, aircraft dispatchers, flight navigators and engineers, and air traffic controllers. Flight, ground, and mechanic schools must also be approved. The FAA also fosters the construction

and improvements of airports; protects the environment by setting noise limits; combats hijacking; and conducts research and development programs.

Federal Participation in Railroad Regulation.

The Federal Railroad Administration responsibilities include the operation of the Bureau of Railroad Safety, the Office of High Speed Ground Transportation, and the Alaska Railroad.

Derailments have more than doubled in the last decade. The growing volume of hazardous materials being transported daily increases the probability of disasters. About two-thirds of all fatalities involving trains occur at crossings. Federal workers are attempting to reduce hazards and accidents at our public grade crossings. The Bureau of Railroad Safety enforces all rail safety regulations and determines how railroads can operate in a safer manner.

The Future Picture.

The problem of transportation in our nation is severe. There is simply too much traffic for our present systems to handle. Transportation experts have many ideas about relieving this problem. Some would like to ban cars from the inner city altogether. Others feel that actions such as adding more one-way streets, electronic traffic control, and off-street parking, would solve the problem. Still others favor the use of helicopters and monorails.

In the future, both local and state government will have a great need for a variety of professional, paraprofessional, and skilled level personnel to meet the challenge of providing safe, rapid, and efficient methods of transporting our nation's people and goods.

TEACHER MANAGEMENT ACTIVITIES

- Determine, for one week, the total number of miles operated by the vehicles selected by the class.
- Identify the improvement that was most desired in the class surveys.
- Invite speakers from the various job families to visit the class.
- Have each student make a short presentation on one position in transportation management. Contrast the duties performed among the various job families.

- Prepare a list of local transportation management agencies.
- Discuss the statistics on traffic injuries and fatalities in your area.
- Ask students to tell which intersections they consider hazardous, and why they feel this is so.

RESOURCES

BOOKS:

Your Country and the World, Sinn and Company, 1969.

Exploring the Urban World, Globe Book Company, 1972.

Challenges In Our Changing Urban Society, Laidlaw Brothers, 1969.

Hello, World! Transportation, Ruth Love Holloway and Elaine H. Stowe, Field Educational Publications, Inc., 1973.

Transportation, J. G. Ferguson, 1970.

Transportation in the World of the Future, J. B. Lippincott, 1968.

The Automobile Story, General Motors, Free, 1968.

Railroads, Charles E. Merrill, 1969.

FILMSTRIPS:

Our National Resources, Filmstrip House, (color, purchase), 1970.

Transportation In The U.S.A., Curriculum Materials Corp., (color, purchase), 1969.

Transportation, Bailey-Film Associates, (color, sound, purchase), 1969.

Transportation, Filmstrip House, (color, purchase), 1970.

Transportation and Modern Life, McGraw-Hill, (black and white), 1969.

Our Transportation Problem, Key Productions, (black and white, purchase), 1969.

Transportation Today, Coronet Films, (color, sound, purchase), 1970.

The Methods We Use, Coronet Films, (color, sound, purchase), 1970.

Systems Work Together, Coronet Films, (color, sound, purchase), 1970.

Dependence on Transportation Workers, Curriculum Materials Corporation, (color, purchase), 1970.

Land Transportation, Curriculum Materials Corporation, (color, purchase), 1979.

Transportation on Land, Eye Gate House, (color, sound, purchase), 1970.

You and the Automobile, Key Productions, (black and white, purchase), 1969.

Our Roads--A National Problem, Wayne State University, (black and white, purchase), 1969.

Highway Systems, Coronet Films, (color, sound, purchase), 1970.

The Airplane Changes America, Universal Education and Visual Arts, (color, sound, purchase), 1969.

Air Transportation, Curriculum Materials Corp., (color, purchase), 1969.

Transportation by Air, Eye Gate House, (color, sound, purchase), 1970.

Air Systems, Coronet Films, (color, sound, purchase), 1970.

The Airport: What You'd See There, Bailey Film Associates, (color, sound, purchase), 1969.

The Airport: Who Works There, Bailey Film Associates, (color, sound, purchase), 1969.

Rail Systems, Coronet Films, (color, sound, purchase), 1970.

The Railroad Terminal: What You'd See There, Bailey Film Associates, (color, sound, purchase), 1969.

The Railroad Terminal: Who Works There, Bailey Film Associates, (color, sound, purchase), 1969.

The Bus and Truck Terminal: What You'd See There, Bailey Film Associates, (color, sound, purchase), 1969.

The Bus and Truck Terminal: Who Works There, Bailey Film Associates, (color, sound, purchase), 1969.

The Harbor: Who Works There, Bailey Film Associates, (color, sound, purchase), 1969.

FILMS:

Transportation in the Modern World, Coronet Films, (11 min., black and white or color, sound, purchase), 1970.

A Trip from Chicago, Union Carbide, (30 min., color, sound, loan), 1969.

Fair Today - Futurama Tomorrow, General Motors, (26 min., color, sound, loan), 1969.

MAP:

Occupations: Transportation, Denoyer-Geppert, (color, purchase), 1969.

INDIVIDUAL STUDENT ACTIVITY

How could transportation in your area be improved? Survey the residents of your community to find out what your transportation needs are. Ask each resident to choose the one thing that would improve transportation in your area.

RESIDENTS

	1	2	3	4	5	6	7	8	9	10
More traffic signals										
More bike lanes										
A rapid transit system										
More one-way streets										
Better air service										
More freeways										
Timed traffic signals										
Higher speed limits										
Lower speed limits										
Left-turn lanes										
Better train service										
Safer intersections										
Better bus service										
Wider streets										

INDIVIDUAL STUDENT ACTIVITY

Count the number of motor vehicles that belong to the residents of your block.

		Trucks	Cars	Motor Cycles	Others	Total Number
Family	#1					
	#2					
	#3					
	#4					
	#5					
	#6					
	#7					
	#8					
	#9					
	#10					
	#11					
	#12					
	#13					
	#14					
	#15					
	#16					
	#17					
	#18					
	#19					
	#20					
Total		_____	_____	_____	_____	_____

INDIVIDUAL STUDENT ACTIVITY

Select a motor vehicle that your family uses often. Keep a record of the trips made by that vehicle for one week.

Mileage at the beginning of the week _____

Trip	Reason for the Trip
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
13	
14	
15	
16	
17	
18	
19	
20	

Mileage at the end of the week _____

Miles operated during the week _____

INDIVIDUAL STUDENT ACTIVITY

Ask your family and neighbors to answer the following questions:

Person	How far do you travel to work?	If you travel by automobile, how many people are in the car?	At what time do you leave work?	Would you use public transportation if it were convenient?
# 1				
# 2				
# 3				
# 4				
# 5				
# 6				
# 7				
# 8				
# 9				
#10				
#11				
#12				
#13				
#14				
#15				
#16				
#17				
#18				
#19				
#20				

Appendix A

RESOURCE SUPPLIERS

Appendix A

RESOURCE SUPPLIERS

This appendix is a listing of suppliers of resources itemized at the end of each unit of the individual sections.

Abingdon Press
Nashville, TN 37202

Academy Films, Inc.
748 N. Seward Street
Hollywood, CA 90038

Aetna Life and Casualty
151 Farmington Avenue
Hartford, CT 06115

AEVAC Inc.
500 Fifth Avenue
New York, NY 10036

Allyn and Bacon Inc.
470 Atlantic Avenue
Boston, MA 02210

American Book Company
Van Nostrand
300 Pike Street
Cincinnati, OH 54202

American Educational Films
9304 Santa Monica Boulevard
Beverly Hills, CA 90210

American Education Publications
Education Center
Columbus, OH 43216

American Forestry Association
919 17th Street, N.W.
Washington, D. C. 20006

American Gas Association, Inc.
605 Third Avenue
New York, NY 10016

American Guidance Service, Inc.
Publishers Building
Circle Pines, MN 55014

American Institute of Planners
917 15th Street, N. W.
Washington, D. C. 20005

American Library Association
50 East Huron Street
Chicago, IL 60611

American Mutual Insurance
20 North Wacker Dr.
Chicago, IL 60606

American Sheep Producers Council, Inc.
Suite 520, Railway Exchange Building
909 17th Street
Denver, CO 80202

Appleton-Century-Crofts
440 Park Avenue South
New York, NY 10016

Associated Film Service
3407 Magnolia Boulevard
Burbank, CA 91505

Association Films, Inc.
600 Madison Avenue
New York, NY 10022

Athletic Institute
805 Merchandise Mart
Chicago, IL 60654

Bailey-Film Associates
11559 Santa Monica Boulevard
West Los Angeles, CA 90025

Arthur Barr Productions, Inc.
1029 North Allen Avenue
Pasadena, CA 91104

Behavior Research Laboratory
Box 577
Palo Alto, CA 94302

Benefic Press
10300 W. Roosevelt Road
Westchester, IL 60153

Channing L. Bete Co., Inc.
45 Federal Street
Greenfield, MA 01301

B'nai B'rith
315 Lexington Avenue
New York, NY 10016

California Highway Patrol
2611 26th Street
Sacramento, CA 95618

Carman Educational Associates
P.O. Box 205
Youngstown, NY 14174

Carousel Films, Inc.
1501 Broadway, Suite 1503
New York, NY 10036

CENCO Education Aids
2600 S. Kostner Avenue
Chicago, IL 60623

Chronicle Guidance Publications
Moravia, NY 13118

Churchill Films
662 N. Robertson Boulevard
Los Angeles, CA 90069

Columbia University Press
Center for Mass Communication
440 West 110th Street
New York, NY 10025

Connecticut State Department of Health
Public Health Education Section
79 Elm Street
Hartford, CN 06115

Coronet Films
65 E. South Water Street
Chicago, IL 60601

Creative Visuals
Box 1911
Big Spring, TX 79720

Curriculum Materials Corporation
1319 Vine Street
Philadelphia, PA 19107

Denoyer-Geppert Company
5235 Ravenswood Avenue
Chicago, IL 60640

Dibie-Dash Productions
4949 Hollywood Blvd.
Los Angeles, CA 90037

Walt Disney 16MM Films
800 Sonora Avenue
Glendale, CA 91201

Doubleday and Company, Inc.
501 Franklin Avenue
Garden City, NY 11531

Educational Activities, Inc.
P. O. Box 392
Freeport, Long Island, NY 11520

EMC Corporation
180 E. 6th Street
St. Paul, MN 55101

Encyclopaedia Britannica
Educational Corporation
425 N. Michigan Avenue
Chicago, IL 60611

Enrichment Teaching Materials
246 Fifth Avenue
New York, NY 10001

Eye Gate House, Inc.
146-01 Archer Avenue
Jamaica, NY 11435

Fearon Publishers
2165 Park Boulevard
Palo Alto, CA 94306

J. G. Ferguson Publishing Company
6 North Michigan Avenue
Chicago, IL 60602

Field Enterprises Educational Corp.
Merchandise Mart Plaza
Chicago, IL 60654

Films, Inc.
1144 Wilmette Avenue
Wilmette, IL 60091

Filmstrip House, Inc.
432 Park Avenue South
New York, NY 10016

Follett Educational Corporation
1010 West Washington Boulevard
Chicago, IL 60607

General Electronics Laboratories
1085 Commonwealth Avenue
Boston, MA 02215

General Motors Corporation
General Motors Film Library
General Motors Building
Detroit, MI 48202

Ginn and Company
Statler Building
Boston, MA 02117

Globe Book Company
175 Fifth Avenue
New York, NY 10010

Guidance Associates of Pleasantville
23 Washington Avenue
Pleasantville, NY 10570

Gypsum Association
201 North Wells Street
Chicago, IL 60606

E. M. Hale and Company Publishers
1201 South Hastings Way
Eau Claire, WI 54701

Harcourt Brace Jovanovich
757 Third Avenue
New York, NY 10017

Harper and Row Publishers
School Department
2500 Crawford Avenue
Evanston, IL 60201

Hawthorn Books, Inc.
70 Fifth Avenue
New York, NY 10011

Henk Newenhouse/Novo
1825 Willow Road
Northfield, IL 60093

Highway Safety Foundation, Inc.
P. O. Box 1563
Mansfiled, OH 44907

Houghton-Mifflin Company
110 Fremont Street
Boston, MA 02107

Imperial Film Company
321 South Florida Avenue
Lakeland, FL 33803

Imperial International Learning
247 West Court Street
Kankakee, IL 60901

Indiana University
Audio-Visual Center
Field Services Department
Bloomington, IN 47401

Institutional Cinema Service
29 East 10th Street
New York, NY 10003

Instructional Aids, Inc.
P. O. Box 191
Mankalo, MI 56001

International Film Bureau, Inc.
332 South Michigan Avenue
Chicago, IL 60604

IQ Films, Inc.
689 Fifth Avenue
New York, NY 10022

Jam Handy School Service, Inc
2781 East Grand Boulevard
Detroit, MI 48211

Journal Films, Inc.
909 W. Diversey Parkway
Chicago, IL 60614

Key Productions, Inc.
527 Madison Avenue
New York, NY 10022

Alfred A. Knopf, Inc.
201 East Fiftieth Street
New York, NY 10022

Laidlaw Brothers
Thatcher and Madison
RiverForest, IL 60305

J. B. Lippincott Company
East Washington Square
Philadelphia, PA 19105

Long Filmslide Service
7505 Fairmont Avenue
El Cerrito, CA 94530

Lyons and Carnahan-Educational Pub.
407 E. 25th Street
Chicago, IL 60616

Macmillan Company
866 Third Avenue
New York, NY 10022

McGraw-Hill Book Company
330 West 42nd Street
New York, NY 10036

Charles E. Merrill
1300 Alum Creek Drive
Columbus, Ohio 43216

MPATI, Inc.
Memorial Center
Purdue University
Lafayette, IN 47902

NASCO
Fort Atkinson, WI 53538

National Association of
Housing and Redevelopment Officials
Publications Department
1413 K Street, N. W.
Washington, D. C. 20005

National Center for Audio Tapes
University of Colorado
Stadium Building
Boulder, CO 80302

National Education Association
1201 Sixteenth Street, N. W.
Washington, D. C. 20036

National Recreation and Park Assoc.
1700 Pennsylvania Avenue, N.W.
Washington, D. C. 20006

National Safety Council
425 N. Michigan Avenue
Chicago, IL 60611

NBC Educational Enterprises
Room 1040, 30 Rockefeller Plaza
New York, NY 10020

A. J. Nystrom and Company
3333 Elston Avenue
Chicago, IL 60618

Olcott Forward, Inc.
234 N. Central Avenue
Hartsdale, NY 10530

Paulist Productions
17575 Pacific Coast Highway
Pacific Palisades, CA 90272

Penquin Books, Inc.
7110 Ambassador Road
Baltimore, MD 21207

George A. Pflaum, Publisher
38West Fifth Street
Dayton, Ohio 45402

Pharmaceutical Manufacturers Assoc.
1155 Fifteenth Street, N. W.
Washington, D. C. 20005

Popular Science Publishing Company
Audio-Visual Division
355 Lexington Avenue
New York, NY 10017

Prentice-Hall
Englewood Cliffs, NJ 07632

Progressive Pictures
1810 Francisca Court
Benicia, CA 94510

G. P. Putnam's Sons Coward-Mccann Inc.
200 Madison Avenue
New York, NY 10016

Rand McNally and Company
405 Park Avenue
New York, NY 10022

Frank E. Richards Publishing Company
324 First Street
Liverpool, NY 13088

Serina Press
70 Kennedy Street
Alexandria, VA 22305

Signal Press
1730 Chicago Avenue
Evanston, IL 60201

Simon and Schuster, Inc.
Rockefeller Center
630 Fifth Avenue
New York, NY 10020

L. W. Singer Company, Inc.
201 E. 50th Street
New York, NY 10022

Society for Visual Education, Inc.
1345 Diversey Parkway
Chicago, IL 60614

Steck-Vaughn Company Publishers
P. O. Box 2028
Austin, TX 78767

Sterling Educational Films
241 East 34th Street
New York, NY 10016

Tax Foundation, Inc.
50 Rockefeller Plaza
New York, NY 10020

Charles C. Thomas Publishers
301-327 E. Lawrence Avenue
Springfield, IL 62703

Tweedy Transparencies
208 Hollywood Avenue
East Orange, NJ 07018

Union Carbide Corporation
270 Park Avenue
New York, NY 10017

United Methodist Church Board of Missions
7820 Reading Road
Cincinnati, OH 45237

United States Civil Service Commission
1900 E Street, N. W.
Washington, D. C. 20415

United States Department of the Interior
Bureau of Land Management
Washington, D. C. 20240

United States Environmental Protection Agency
Washington, D. C. 20460

United States Government Printing Office
Division of Public Documents
Washington, D. C. 20402

United States Immigration and
Naturalization Service
119 D Street, N.E.
Washington, D. C. 20536

United States Internal Revenue Service
or Regional Offices
Washington, D. C. 20220

United States National Audiovisual
National Archives and Records Service
Washington, D. C. 20409

Universal Educational and Visual Arts
221 Park Avenue South
New York, NY 10003

Van Nostrand Reinhold Company
450 West 33rd Street
New York, NY 10001

Visual Education Consultants, Inc.
2066 Helena Street
Box 52
Madison, WI 53701

Visual Materials, Inc.
Redwood City, CA 94063

Vocational Education Productions
California State Polytechnic College
San Luis Obispo, CA 93401

Washington Square Press
630 Fifth Avenue
New York, NY 10022

Franklin Watts, Inc.
575 Lexington Avenue
New York, NY 10022

Wayne State University
Audio-Visual Production Center
Distribution Department
680 Putnam
Detroit, MI 48202

Western Electric Company
Motion Picture Bureau
Public Relations Division
195 Broadway
New York, NY 10007

Western Publishing Company, Inc.
850 Third Avenue
New York, NY 10022

Albert Whitman
560 West Lake Street
Chicago, IL 60606

John Wiley and Sons, Inc.
605 Third Street
New York, NY 10016

H. Wilson Corporation
555 W. Taft Drive
South Holland, IL 60473

Wing Productions
252 Great Road
Bedford, MA 01730

David L. Wolper Productions
8489 West Third Street
Los Angeles, CA 90048

Worchester Film Corporation
131 Central Street
Worchester, MA 01608

Appendix **B**

SUGGESTED EVALUATION QUESTIONS FOR PRE- AND POST-TESTS

Introduction

The Exploring Public Service Occupations curriculum guide deals with the wide range of jobs found in the public service career family. This exploration guide was developed primarily for students in grades 6 through 9. The Exploring Public Service Occupations guide is the first in a series of curriculum guides that is aimed at exploring, orienting, and preparing students for entry-level jobs in public service occupation. Consequently, the material in this guide is designed to enable each student to explore the following major occupational groups: resources management, educational services, governmental agency management, public safety, corrections and judicial services, rural, urban, and community development, social and economic services, regulatory services and records, and transportation. In order to give each student a feeling of what a particular public service job is like, the curriculum stresses the attitudes, feelings, and emotions, as well as the functions and duties of the workers. Both the economic and psychological benefits of working in public-service are discussed.

These tests were developed to help teachers:

(1) measure student learning gain.
(2) determine if the instructional objectives have been met.

Test Contents

Any evaluation of student learning should adhere closely to the intended outcomes expressed in the written objectives. Therefore, each test is based on the specific instructional objectives found in its corresponding unit in the Common Core guide. Every item of each test is directly associated with one of the objectives found in the guide for that unit.

These tests are structured to help determine whether the student has become competent or not in each unit. The items for each test relate only to the instructional objectives found at the beginning of that unit in the guide. No test items refer to material found in previous or later units. Consequently, each unit in the teacher's guide and its corresponding test can be used independently.

The evaluative approach used in these tests is not designed to measure the relative standing of each student to an actual or hypothetical population. Rather, it is designed to report a student's performance solely in terms of objectives mastered or not mastered. Each student is to reach or exceed the minimum performance standard or criterion. Hence, this testing is called criterion referenced testing.

Directions

The tests have been prepared as master copies which may be duplicated for student distribution.

There is a separate test for each unit of instruction in the curriculum guide. For example, test number one can be used as a pretest and a post-test with the content in Exploring Public Services, Unit 1.

Because each class is unique, instructors may add or delete any test items desired.

These tests have been given under nearly every conceivable condition, formal group testing, informal individual sessions, and "take home" tests. In so far as can be determined, satisfactory results were obtained under every condition.

In response to the demand for a system that is easy to use, a convenient answer key for each test has been included in this folder.

The tests provide an objective method for determining student learning gain, while freeing teachers to use valuable time for instruction.

Validity

The validity of any test must be determined in reference to the particular use for which the test is being considered. As these tests are essentially measures of student achievement, they must have content validity. Content validity involves the systematic examination of the test content to insure that it covers a representative sample of the behavior domain to be measured. By employing questions that directly relate to the instructional objectives in each unit, content validity is insured.

An experimental edition of this test was field tested in twelve schools, which were selected on the basis of size of school and community. Over 1,000 secondary school students were involved in the validation testing. Socio-economic groups taking the test ranged from the disadvantaged to upper middle-class. The schools were also selected to gain a student population from urban, suburban, and rural areas. In each of the schools, the teacher first gave the students a pretest before the content was introduced. The same testing instrument was used as a post-test. The objectives were to measure student learning which took place as a result of studying the material in the instructional unit, and to establish criterion referenced tests for use by schools throughout the country. For this purpose, a percentage passing of 70 percent or above on the post-test was considered to be an acceptable criterion mastery for that unit. No norms were established for these tests. It is suggested that each student be able to successfully pass 70 percent of the questions for each instructional unit that he is tested on. During this field test, suggestions for improving these tests were also made. The criterion referenced tests in this booklet are based on the pretest and post-test material used in this validation study.

Other Means of Evaluation

Instructors may wish to assign individual projects, with each student rated by the quality of work done on the project.

The following is a short list of suggested activities for evaluating student achievement.

It should be remembered that an instructor can use a wide assortment of test situations to evaluate students.

The class may be divided into small groups, with students rated according to their contribution to the group effort.

Situational tests can be devised that simulate real-life situations which are likely to occur.

Role-playing is another excellent technique which could be employed to gain insights into a student's ability.

Acknowledgements

The Public Service Occupations tests were developed and field tested in twelve locations. While many people were involved in this project, the staff is particularly indebted to the following people:

Lillian Avery,	Test Research Center Los Angeles, CA
Victor Backstrom,	Long Beach Unified School District Long Beach, CA
Dr. William E. Burns,	State University of New York Buffalo, New York
William Crane,	San Diego Unified School District San Diego, CA
Thomas Franklin,	San Diego Unified School District San Diego, CA
Gilbert Garcia,	Sacramento City Unified School District Sacramento, CA
Lt. Charles Kane,	San Leandro Police Department San Leandro, CA
Dr. Nellie M. Love,	Sweet Home Central School District Amherst, New York
James B. Mayo,	Fremont Unified School District Fremont, CA
Myron Nadolski,	Grant Joint Union School District Sacramento, CA
Nadine L. Reed,	San Diego Unified School District San Diego, CA
James J. Reilley, S.J.,	Canisius High School Buffalo, New York
Rosalia Salinas,	San Diego Unified School District San Diego, CA
Paul E. Sugg,	Williamsville Central Schools Williamsville, New York
Tom Schrodi,	Orange Unified School District Orange, CA
Thea Stitum,	Sacramento City Unified School District Sacramento, CA

Project Staff

Patrick J. Weagraff, Ed. D., Project Director

James J. Lynn, Curriculum Specialist

Constance F. Gipson
Assistant Curriculum Specialist

Harold M. Blue, Senior Editor

Lillian Deger, Typist

Miriam Dong, Typist

Unit 1 Governing Ourselves in a Republic

"Scramble" Game

Unscramble the words below and put the correct word in each blank:

1. Under a _____ form of government the people choose those who will make the laws.
   (cbupeanrli)

2. Members of Congress take _____ to see how the voters feel.
   (solpl)

3. Many citizens send _____ to their representatives.
   (retegamls)

4. _____ groups try to get lawmakers to pass bills favorable to their groups.
   (sepusrer)

5. _____ furnish information to lawmakers.
   (sliboeb)

6. Citizens can challenge the law by taking a _____ _____ to court.
   (sett) (esac)

7. People who attend conventions choose their party's _____.
   (dacendiast)

8. A group of citizens who cannot get their views adopted by big parties can form a _____ _____.
   (hrtid) (ryapt)

9. The party's stand on an issue is called a _____ in the platform.
   (lapkn)

10. Voters who feel strongly about issues often place _____ _____ on their cars.
    (epubrm) (kitscesr)

11. The most important way to participate in government is to cast a _____ in every election.
    (labolt)

Answer Key

1. republican
2. polls
3. telegrams
4. pressure
5. lobbies
6. test case
7. candidates
8. third party
9. plank
10. bumper stickers
11. ballot

Unit 2 How Our Country is Governed

Put the correct number on each line. When you have finished, add the numbers together. Your total should be 218.

a. How many branches does the federal government have? _____

b. The President is elected for a _____ year term. _____

c. The President is limited to _____ elected terms of office. _____

d. The President must be _____ years old. _____

e. How many senators does each state have? _____

f. What is the total number of U.S. Senators? _____

g. Each Senator is elected for _____ years. _____

h. A Senator must be _____ years old. _____

i. Each Representative must be _____ years old. _____

j. Each Representative is elected for _____ years. _____

k. How many Justices serve on the Supreme Court? _____

TOTAL 218

Answer Key

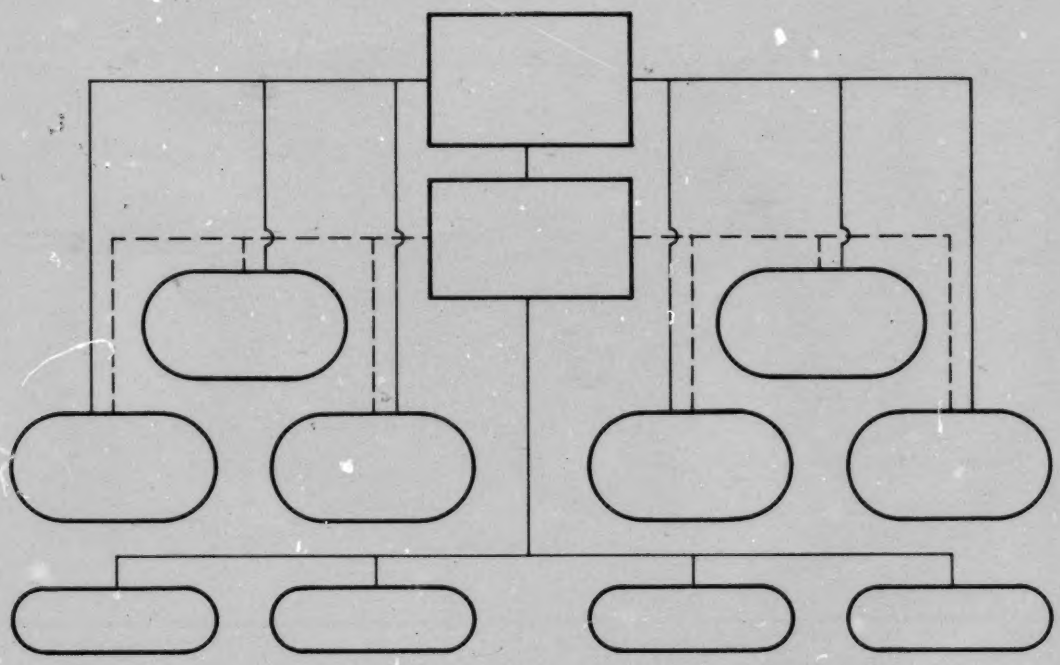
a.	3	e.	2	i.	25
b.	4	f.	100	j.	2
c.	2	g.	6	k.	9
d.	35	h.	30		

Unit 3 How the State is Governed

As the teacher reads a description of a state government position, find the correct answer and write it in the proper place.

Example: No. 1 — We elect the officials that run our state. we are the

(Voters)



Choose your answers from the list below:

Attorney General	Auditor	Highways
Governor	Fish and Game	Lieutenant Governor
Treasurer	Welfare	Health
Superintendent of Public Instruction		Secretary of State

Clues:

3. I am in charge of the state records. I make sure that the election laws of the state are followed. I am the Secretary of State.

5. I can appoint people to some state jobs. I can pardon criminals. I am the Chief Executive of the state. I am the Governor.

7. I watch the state treasury. I make sure that the money is spent properly. I am the Auditor.

9. I am the person who is in charge when the Governor is away. I become Governor if the Governor dies. I am the Lieutenant Governor.

10. I am in charge of the state's schools. I am responsible for certifying teachers and school lunches. I am the Superintendent of Public Instruction.

11. I pay the state's bills. I am the Treasurer.

2. My Department watches the growth of wildlife in the state. I run the Department of Fish and Game.

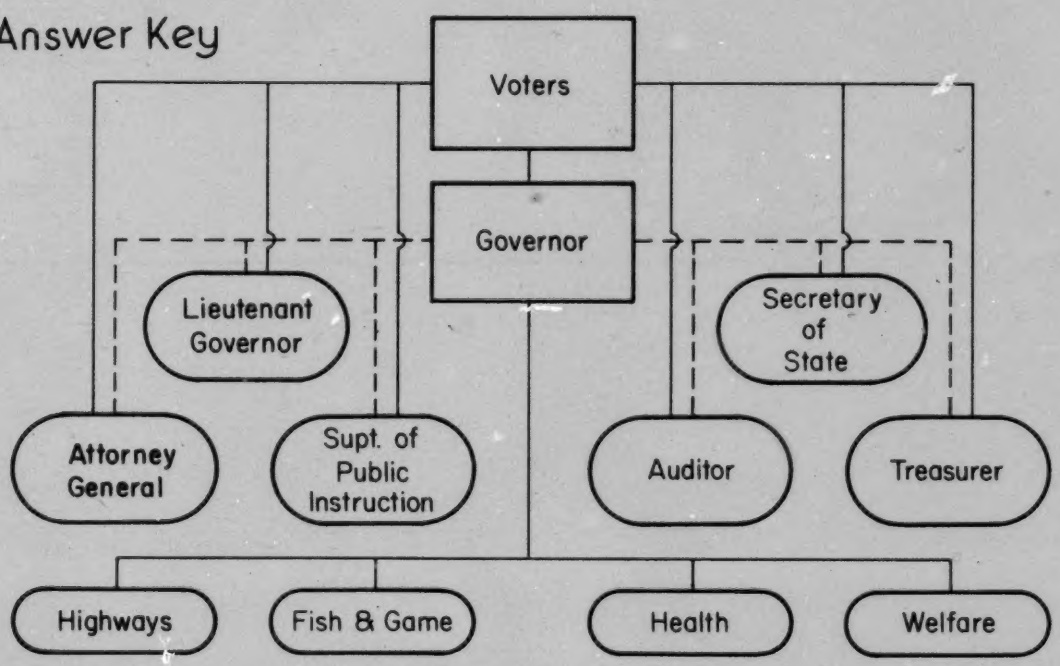
4. My Department builds bridges, digs ditches, cuts weeds, and plows snow. I run the Department of Highways.

6. My Department helps people who are out of work. I run the Department of Welfare.

8. My Department is responsible for keeping disease under control. I run the Department of Health.

12. I tell the Governor and other officials what is lawful. I represent the state in court. I am the Attorney General.

Answer Key



Unit 4 How Local Governments are Governed

Fill in the blanks by choosing the proper words from the list at the bottom of the page.

1. A person hired to run the city government is called the _____.
2. The Director of _____ is responsible for the care of streets.
3. Many city workers are _____ _____ employees.
4. _____ workers try to control and prevent contagious diseases.
5. The chief law enforcement officer in the County is the _____.
6. In some cities, the _____ is the Chief Executive of the government.
7. The County _____ is in charge of the county's money.
8. In some cities, a _____ is in charge of a city Department, such as Public Works or Public Safety.
9. The _____ is a group of elected citizens who make the laws for the city government.
10. The County _____ prosecutes people who break the law.
11. The County _____ or Recorder records all real estate deeds.
12. The _____ investigates mysterious deaths.

Sheriff	City Council	City Manager
Mayor	District Attorney	Public Works
Treasurer	Clerk	Civil Service
Commissioner	Coroner	Public Health

Answer Key

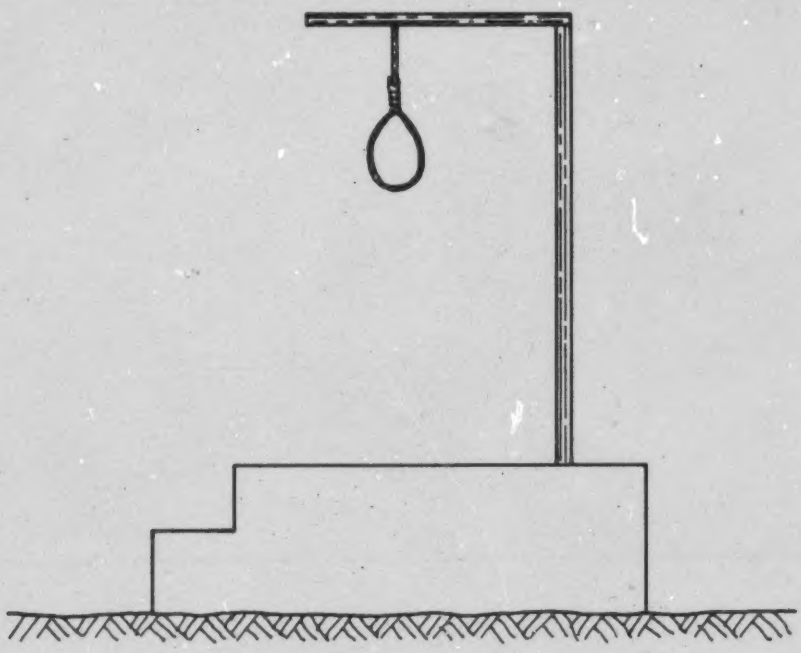
1. City Manager
2. Public Works
3. Civil Service
4. Public Health
5. Sheriff
6. Mayor
7. Treasurer
8. Commissioner
9. City Council
10. District Attorney
11. Clerk
12. Coroner

Unit 5 What it Takes to be a Public-Service Worker "Hangman"

Fill in the blanks below by using the clues your teacher will give you. Put the first letter of the word that fits the clue on the proper line.

Example: If the clue is, "Word 2 - Instructions are given both _____ and in writing," the clue word would be "orally," and you would put an "O" on line 2.

____	O	____	____	____	____	____	____	____	____	____
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.



On your first miss, you must draw a head in the hangman's noose;

On the second miss, the body;

On the third miss, one arm;

On the fourth miss, the other arm;

On the fifth miss, one leg;

On the sixth miss, the other leg;

AND YOU'RE HUNG!

Clues for the Hangman Game:

2. Instructions are given both orally and in writing.

6. In order for people to be able to follow oral instructions, they must be clear and specific.

9. Fire-control technicians usually will have completed a two-year community college course with specialization in the field of their interests.

1. An example of a public-service occupational area requiring only a high-school diploma is that of the clerical worker.

4. In writing sentences we often use punctuation to make our meaning clear. In speaking we may use tone of voice.

7. Cleanliness of the body and hair is essential to good grooming.

11. Public-service occupations are classified according to level of skill needed for a specific job.

8. Each public-service job will have the qualifications that are unique to that job.

5. Since government employees represent the government to the public, they must always and

3. be neat in appearance.

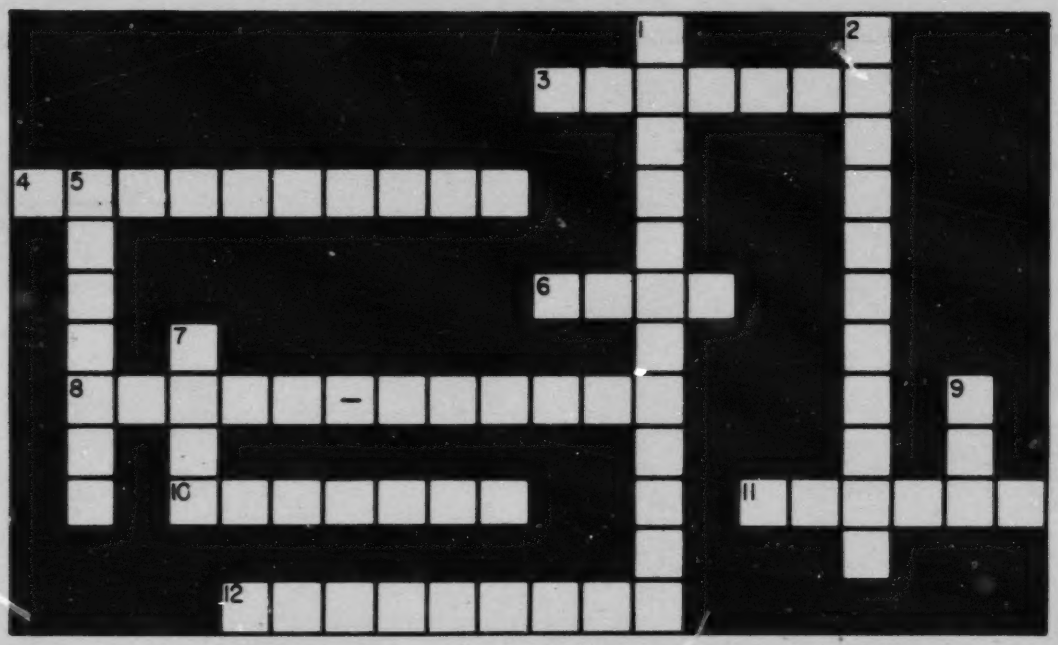
10. Public-service employees must be willing to learn.

Here is the word:

C	O	N	T	R	I	B	U	T	E	S
1	2	3	4	5	6	7	8	9	10	11

Unit 6 How Public-Service Workers are Chosen

Crossword Puzzle



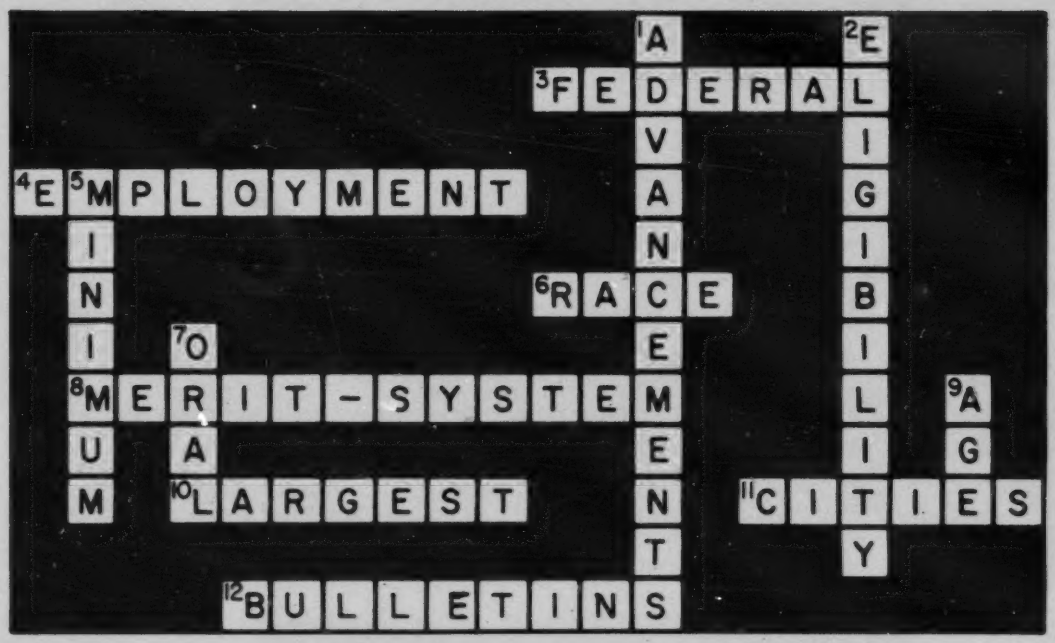
ACROSS:

3. The U.S. Civil Service Commission announces and conducts examinations for public service occupations for the _____ government.
4. Information about current job openings may be found in state _____ offices.
6. All persons who meet the qualifications are given consideration without regard to _____, color, creed or national origin.
8. State _____ _____ boards conduct examinations for public service jobs at the state level.
10. Government is the _____ employer in the United States.
11. Most _____ and towns now also have civil service systems for public service jobs.
12. Job openings in public service occupations are announced in _____

DOWN:

1. There are many opportunities for _____ in the civil service.
2. Job offers are made from the _____ list in the order the names appear on it.
5. In order to be eligible for a public service job, a person must pass the tests with a _____ score.
7. Some public service workers will be chosen by _____ test only.
9. A public service worker usually has to meet requirements such as _____, citizenship, physical condition.

Answer Key

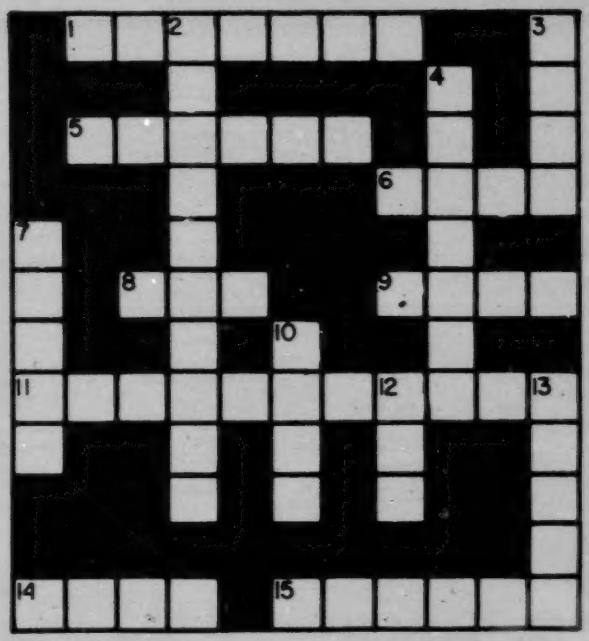


Exploration of Public Service Occupations

Evaluation Questions

7

Unit 7 Financing Government Services **Crossword Puzzle**



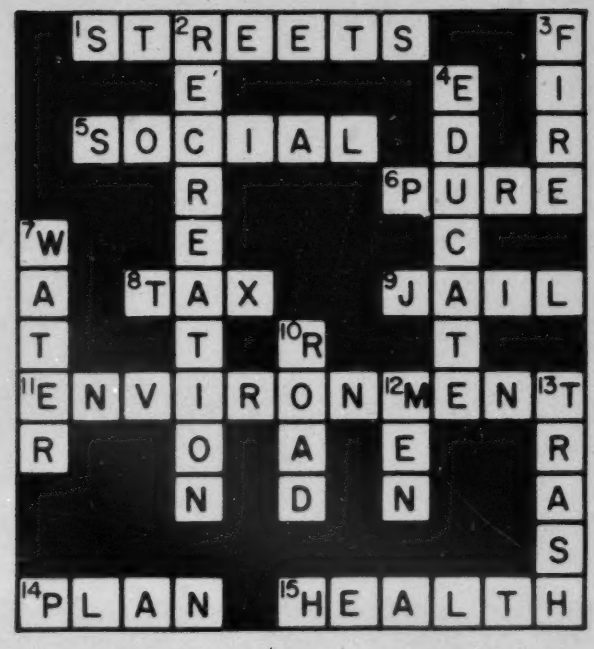
ACROSS:

1. City workers keep our _____ clean.
5. Aid to the blind and the poor are _____ services.
6. Foods and drugs must be kept _____.
8. Citizens pay an income _____ to pay for government services.
9. People who have broken the law are often put in _____.
11. Public service workers protect our natural _____.
14. We need workers to _____ our communities for future needs.
15. Public clinics and hospitals are a part of _____ services.

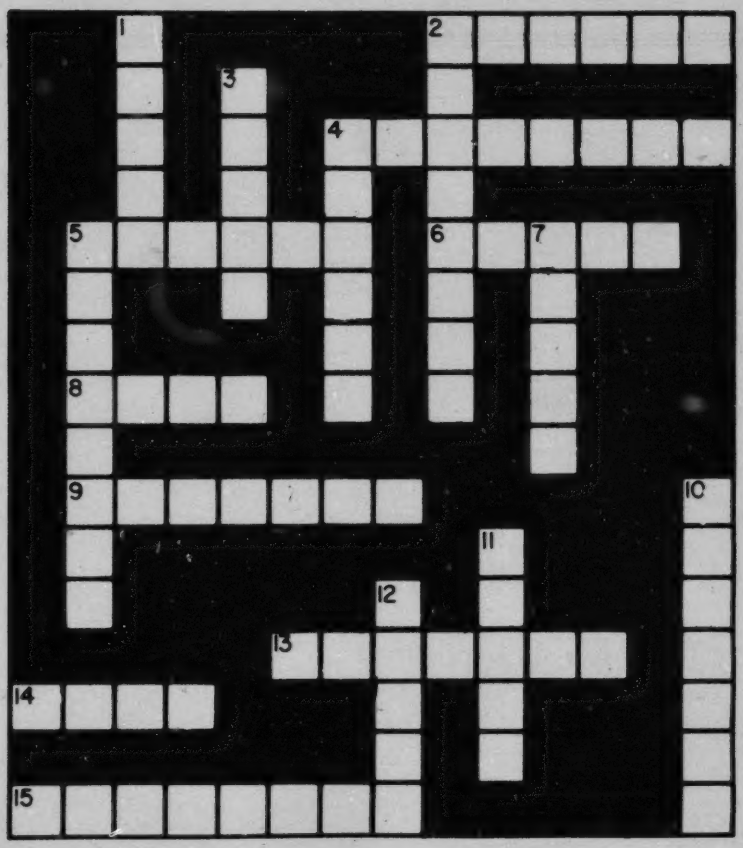
DOWN:

2. Playground workers operate _____ centers for leisure activities.
3. Communities need _____ and police protection.
4. Some public service workers _____ children.
7. Our communities provide _____ that is safe to drink.
10. Public servants build our _____ and highway systems.
12. Many _____ and women are needed to provide services for all.
13. We depend on workers who pick up _____ .

Answer Key



Unit 8 The Government Lends a Hand **Crossword Puzzle**



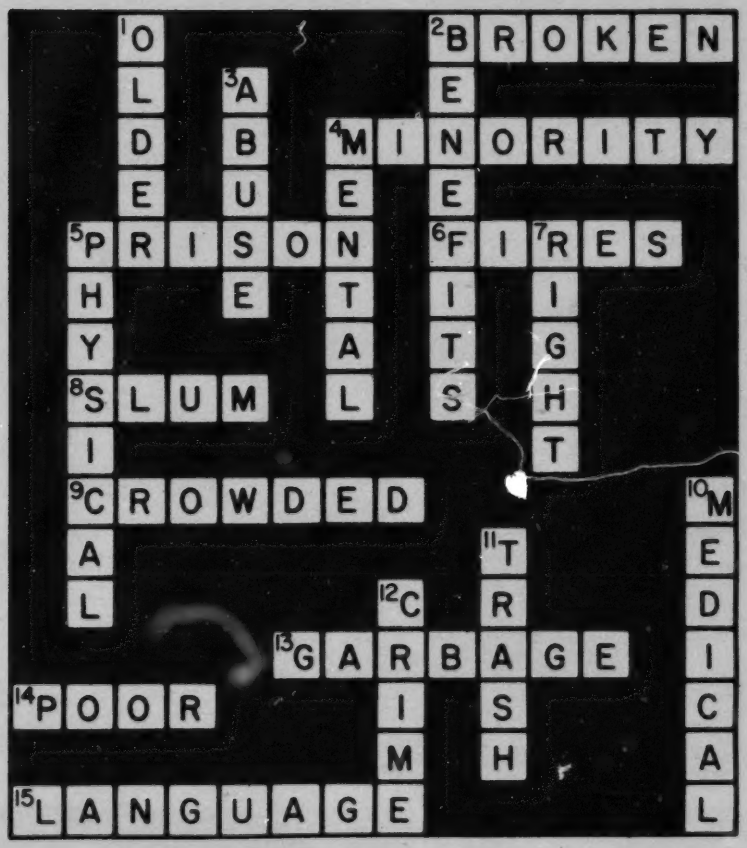
ACROSS:

2. Slum areas have many _____ families.
4. _____ groups often face discrimination.
5. People who have been released from _____ often need help.
6. _____ are a hazard in slum areas.
8. _____ housing may have unhealthy conditions.
9. Housing for the poor is often _____ .
13. _____ may not be picked up regularly in slum areas.
14. Many slum-area families are _____.
15. Minority group members may have _____ problems.

DOWN:

1. _____ people who can no longer work may become needy.
2. Retired workers may get Social Security _____.
3. People with a history of drug _____ may need help.
4. Social service workers help people with _____ illness.
5. People who have _____ handicaps may need help.
7. Social Security benefits are a _____.
10. Poor people need help in paying for _____ care.
11. Slum areas are often littered with _____.
12. Slum areas often have a high _____ rate.

Answer Key



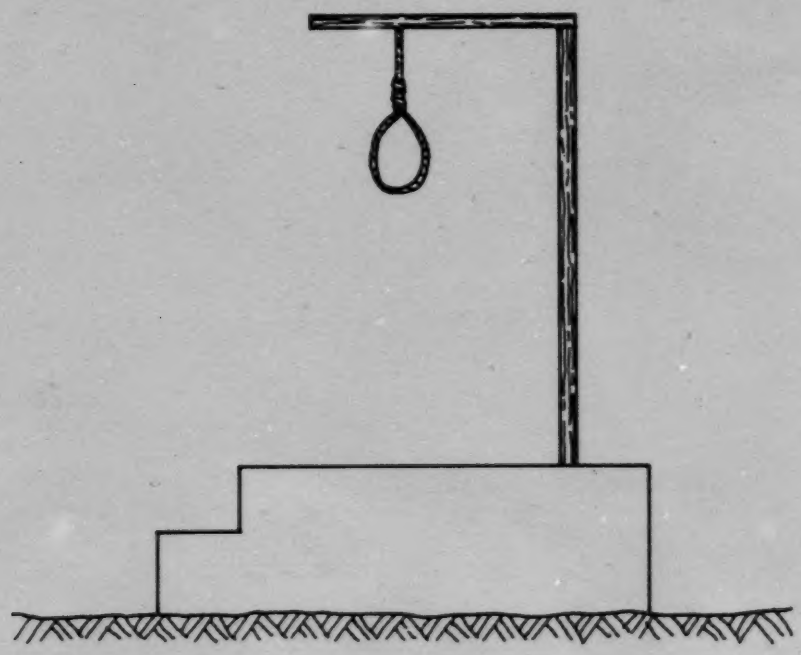
Unit 9 Helping Everyone Enjoy Life

"Hangman"

Fill in the blanks by using the clues your teacher will give you. Put the first letter of the word that fits the clue on the proper line.

____	____	____	____	____	____	I	____	____	____	____
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.

Example: The clue is "Letter 7 — Communities must plan for the _____ and future recreational needs of all people." The clue word is "immediate," and an "I" is placed on line 7).



On your first miss, you must draw a head in the hangman's noose;

On the second miss, the body;

On the third miss, one arm;

On the fourth miss, the other arm;

On the fifth miss, one leg;

On the sixth miss, the other leg,

AND YOU'RE HUNG!

Clues for the Hangman Game:

2. Community centers must meet the needs of people of all ___ages___.

5. Bacteria in swimming pools can cause ___illness___.

4. Park rangers give ___talks___ about wildlife, rocks, and trees.

6. Local ___communities___ have the major responsibility for providing recreational services.

9. Children enjoy ___active___ games and contests.

11. Recreation supervisors hire leaders, supervise workers, and order ___equipment___.

10. Recreation leaders ___teach___ the rules and regulations of many games.

8. Recreation workers ___plan___ and supervise many activities.

3. ___Recreation___ is considered an important part of everyday life.

1. The Grand Canyon is a National ___Park___.

Here is the word:

P	A	R	T	I	C	I	P	A	T	E
1	2	3	4	5	6	7	8	9	10	11

Unit 10 Developing Informed and Educated Citizens "Getting A Doctorate" Game

Place your marker on "Pre-School." On another sheet of paper, answer each question asked by your teacher, as "true" or "false". Each correct answer promotes you one grade. If you miss a question, you must remain in that grade until you answer a question correctly.

Doctorate

Master's Degree

Bachelor's Degree

Associate of Arts Degree

High School Diploma

Grade 12
Grade 11
Grade 10
Grade 9
Grade 8
Grade 7
Grade 6
Grade 5
Grade 4
Grade 3
Grade 2
Grade 1

Kindergarten

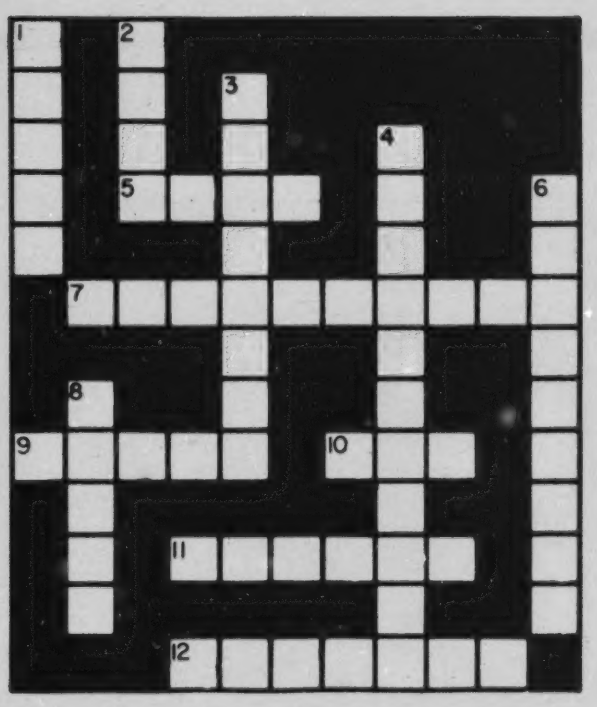
Pre-School

Answer Key

Read these questions aloud. Tell the students the correct answer after they have finished answering the question.

F 1. All American children in 1600 were required to attend public schools.
T 2. Many teenagers in colonial days could not read or write.
T 3. Democracy depends on the education of all citizens.
T 4. Every state now has a tax-supported free public school system.
T 5. The American Public school system is one of the largest in the world.
F 6. The United States has a national school system.
T 7. The federal government pays for some research in education.
T 8. Some books and equipment in local schools were bought by the federal government.
F 9. National laws state that all children under 16 must attend school.
F 10. The federal government is responsible for education.
T 11. The state gives local districts money to operate schools.
F 12. National laws require children to be vaccinated against certain diseases before they can attend school.
F 13. Most of a local district's money comes from income taxes.
T 14. State Department of Education experts help local districts select textbooks.
F 15. It usually takes four years to earn an Associate of Arts degree.
T 16. County superintendents determine educational policy for their counties.
F 17. Most students must go out of their states to receive a college education.
T 18. Local communities have most of the control over their schools.
F 19. Municipal governments are in charge of most local school districts.
F 20. Teachers are responsible for the operation and program of their schools.
F 21. Most elementary teachers work with students from many classes every day.
T 22. High school teachers usually specialize in one subject.
T 23. A bachelor's degree is usually required for teachers.
F 24. The use of paraprofessionals in education has been discontinued.
T 25. Teacher's aides may be expected to do housekeeping duties.
F 26. Children who have handicaps are not permitted to attend school.
T 27. Most professional librarians have a master's degree.
T 28. Many adults are now taking high school courses.
T 29. Public libraries are open to everyone.

Unit 11 A Clean Environment for All **Crossword Puzzle**



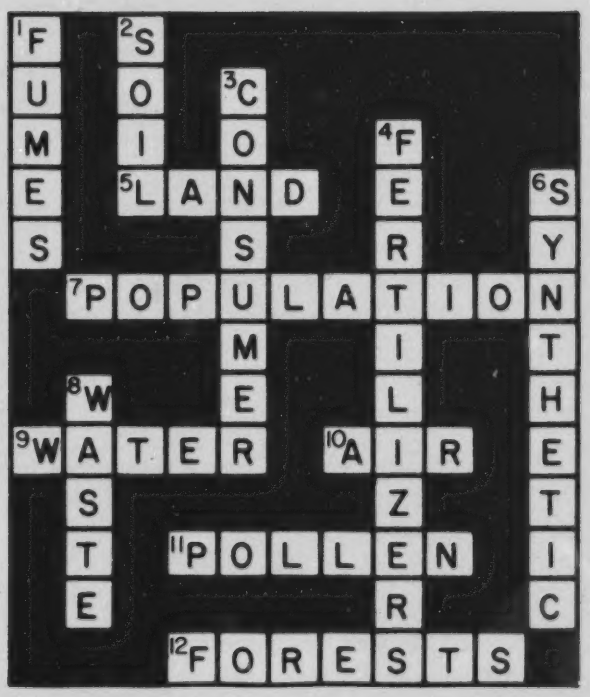
ACROSS:

5. _____ in its natural condition is an irreplaceable natural resource.
7. _____ growth is a major factor in environmental problems.
9. _____ has been called our most mismanaged resource.
10. Geography and weather play major roles in causing _____ pollution crises.
11. Radiation, smoke, dust, and _____ are some causes of pollution.
12. _____ usually renew themselves but they must be protected from insects, diseases, and fires.

DOWN:

1. _____ from exhaust pipes are one source of air pollution.
2. _____ is a replaceable resource which can be worn out by overuse.
3. Our demand for _____ goods depletes our natural resources.
4. Synthetic _____ can replace some of the nitrogen that is taken from soil.
6. _____ or substitute materials are made from natural resources.
8. Packages are a source of solid _____ .

Answer Key



Unit 12 Directing Community Growth

Missing Word Game

Using the clues below, put the proper word in each blank.

Example: Land is a commodity and a resource.

1. Areas which have over 50,000 people are called _____ areas.
2. Building and zoning laws must be _____.
3. Land is a resource which can only be rented by each _____.
4. Our forefathers were overwhelmed by the _____ of available land.
5. _____ architects make highways, buildings, and recreations areas look attractive.
6. _____ space areas are rapidly disappearing.
7. City _____ decide which buildings can be renewed and which buildings can be cleared away.
8. When slumlords subdivide buildings into tiny apartments, _____ often results.
9. Because it is a fixed resource, many groups are competing for _____.
10. Without business and _____, many people would be without jobs.
11. Public _____ workers plan and control the development of our communities.

Find the first letter of each of the missing words and put a circle around it.

Example ➧	C	D	A	B	(R)	S
1.	A	M	S	T	E	R
2.	W	U	O	E	A	S
3.	H	P	R	V	I	G
4.	A	B	U	C	D	R
5.	T	Q	L	O	Z	Y
6.	J	K	F	S	R	O
7.	G	R	I	E	P	C
8.	R	O	D	F	T	A
9.	F	T	B	L	W	U
10.	C	I	E	D	R	K
11.	S	M	N	G	D	R

Put the letters that you circled on the proper lines below to find the missing word.

1	2	3	4	5	6	7	8	9	10	11
____	____	____	____	____	____	____	____	____	____	____

(The missing word is a land area that includes several cities that are connected)

Answer Key

1. Areas which have over 50,000 people are called __metropolitan__ areas.
2. Building and zoning laws must be __enforced__ .
3. Land is a resource which can only be rented by each __generation__ .
4. Our forefathers were overwhelmed by the __abundance__ of available land.
5. __Landscape__ architects make highways, buildings, and recreation areas look attractive.
6. __Open__ space areas are rapidly disappearing.
7. City __planners__ decide which buildings can be renewed and which buildings can be cleared away.
8. When slumlords subdivide buildings into tiny apartments, __overcrowding__ often results.
9. Because it is a fixed resource, many groups are competing for __land__ .
10. Without business and __industry__ , many people would be without jobs.
11. Public __service__ workers plan and control the development of our communities.

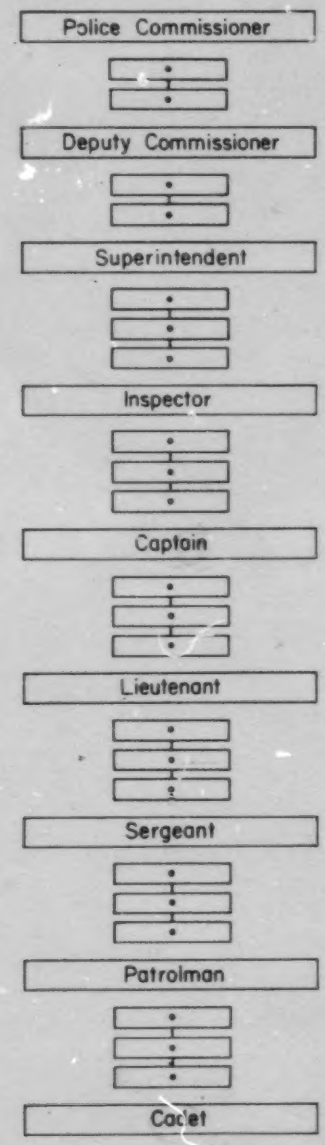
1.	A	M	S	T	E	R
2.	W	U	O	E	A	S
3.	H	P	R	V	I	G
4.	A	B	U	C	D	R
5.	T	Q	L	O	Z	Y
6.	J	K	F	S	R	O
7.	G	R	I	E	P	C
8.	R	O	D	F	T	A
9.	F	T	B	L	W	U
10.	C	I	E	D	R	K
11.	S	M	N	G	D	R

M	E	G	A	L	O	P	O	L	I	S
1	2	3	4	5	6	7	8	9	10	11

Unit 13 Enforcing Our Laws

"Becoming A Police Commissioner" Game

Can you make it to the top? First, place your marker on "cadet." On another sheet of paper, answer as "true" or "false" each question asked by your teacher. For each right answer, advance one spot; for each wrong answer, you must go back one spot.



Answer Key

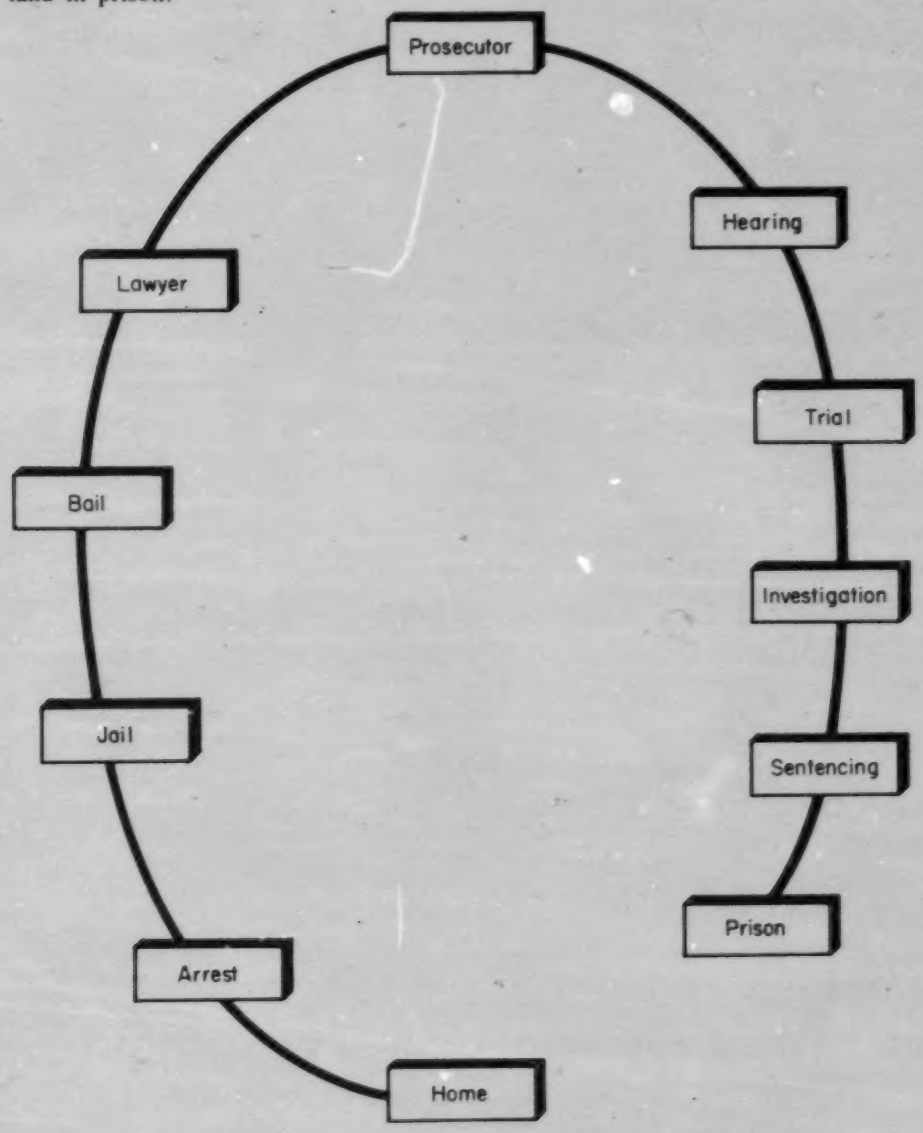
Read these statements aloud, and give the students the correct answer after they have finished answering each question.

(T) 1. Kidnapping is a federal crime.
(F) 2. Gambling is illegal in the United States.
(F) 3. Embezzlement and fraud are violent crimes.
(T) 4. A felony is a major crime.
(F) 5. Misdemeanors are the same in every state.
(T) 6. Phony contests and charities are white-collar crimes.
(F) 7. Most criminologists feel that environment does not affect crime.
(F) 8. Crime investigations are made by precinct captains.
(T) 9. Physical objects provide evidence that is more reliable than eye witnesses.
(F) 10. The most important piece of evidence is the voice print.
(T) 11. County Sheriffs are often required to collect taxes.
(F) 12. Federal law enforcement agencies do not operate outside of Washington, D.C.
(T) 13. State policemen are responsible for enforcing the law in their states.
(T) 14. Things which have moved or been broken can give clues to the investigator.
(T) 15. It is the duty of patrolmen to preserve the peace at public gatherings.
(T) 16. Policemen are called upon frequently to testify in court.
(F) 17. The F.B.I. is responsible for safe highway transportation.
(T) 18. Local police agencies have more law enforcement duties than federal agencies.
(F) 19. Most local policemen are high school dropouts.
(F) 20. Since women are physically weak, police departments do not hire them.
(T) 21. Before their first assignments, policemen usually go through training.
(F) 22. F.B.I. agents protect the President and members of his family.
(T) 23. Property crimes outnumber violent crimes.
(T) 24. The greatest rate of increase in crime has been in the suburbs.
(T) 25. Young people who have broken the law once are likely to do so again.
(T) 26. A large number of crimes in the U.S. are not reported to the police.
(F) 27. Detectives have the responsibility of regulating traffic.
(F) 28. Patrolmen are responsible for recovering stolen property.
(F) 29. County sheriffs are responsible for breaking spy rings and sabotage cases.
(T) 30. The Internal Revenue Service tracks down county moonshiners who make liquor illegally.
(T) 31. Young people under 21 sometimes work as police cadets.

Unit 14 Correcting the Guilty

"Keeping Out Of Prison" Game

Place your marker on "Home" in the drawing below. On another sheet of paper, answer as "true" or "false," each question given you by your teacher. You must move one spot for each wrong answer. Don't land in prison!



Answer Key

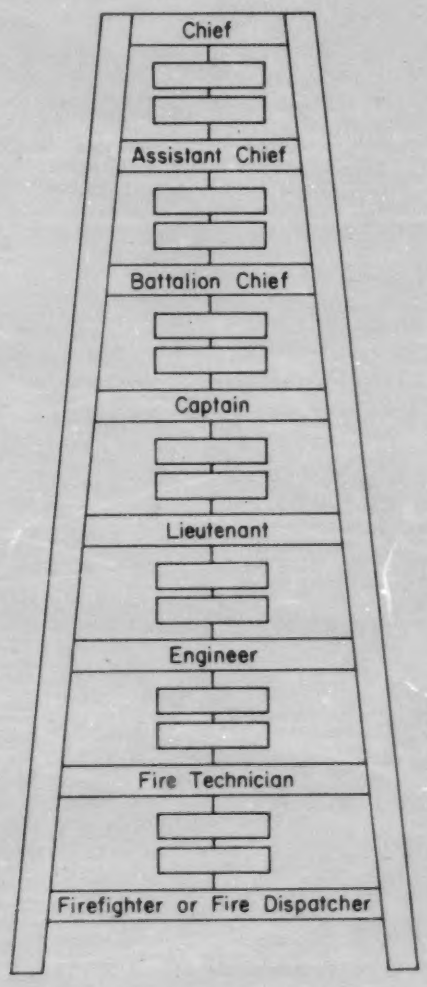
Read these statements aloud, giving the correct answers after the students have finished answering each question. Students who end the game up to "prosecuting attorney" will have their cases dismissed. Those ending at "hearing" receive a "no-bill." Students ending at the "trial" are not guilty. Students ending at "investigation" or "sentencing" receive probation.

1. A dispute between two people over their rights in a contract is tried in a criminal court. (F)
2. A misdemeanor is a major crime. (F)
3. An informal system of handling crimes is better than a formal system. (F)
4. Lawyers for the defense protect the rights of the defendant. (T)
5. Correctional officers help prisoners when they are in trouble. (T)
6. Anyone who is probably guilty cannot receive bail. (F)
7. All people have the right to counsel. (T)
8. The prosecutor tries to persuade the jury that the defendant is innocent. (F)
9. Parole officers help the offender before the trial begins. (F)
10. If a prisoner does well in prison, he becomes eligible for probation. (F)
11. Little crimes are tried in the Small Claims court. (F)
12. Defendants must prove their innocence in order to win. (F)
13. Judges write down everything that is happening in the court. (F)
14. Child abuse and juvenile delinquency are increasing in the suburbs. (T)
15. When the U.S. Constitution doesn't work, government officials change it. (F)
16. Judges decide when jury trials are necessary. (F)
17. Congress can pardon people convicted of breaking federal laws. (F)
18. People cannot be punished for something they did before a law against it was passed. (T)
19. People who have been pardoned must obey parole rules. (F)
20. All people indicted are guilty. (F)
21. Persons who are guilty must testify against themselves. (F)
22. Government officials can place people they dislike in jail. (F)
23. People cannot be tried for the same offense twice. (T)
24. Officials should keep people in jail as long as possible before their trials. (F)
25. A person must be charged by a grand jury if the crime is serious. (T)
26. Judges can order cruel and unusual punishments for offenders. (F)
27. It is the duty of judges to make people post excessive bail. (F)

Unit 15 Preventing and Fighting Fires

"Be a Fire Chief" Game

Can you make it to the top? Place your marker on "Firefighter or Fire Dispatcher." On another sheet of paper, answer as "true" or "false" the statements read by the teacher. Advance one step up the ladder for each correct answer, and down one step for each incorrect answer.



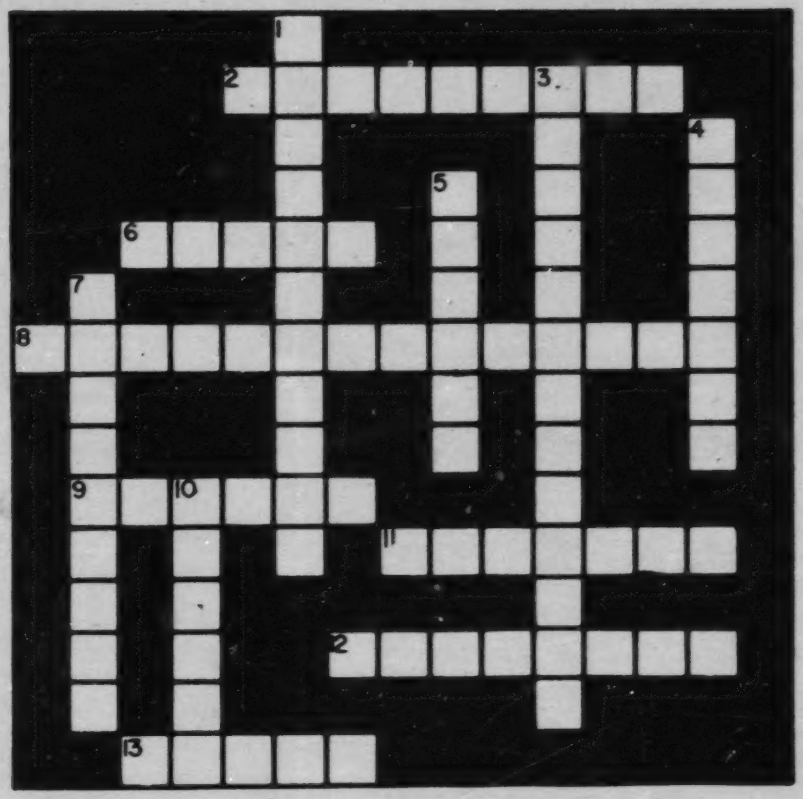
Answer Key

Read these statements aloud, giving the correct answers after the students have finished answering each question.

(F) 1. Fire Dispatchers must suppress fires and rescue people in danger.
(T) 2. Fire Dispatchers send proper equipment to four types of emergencies.
(T) 3. Each fireman has a specific job to do at a fire.
(T) 4. At the scene of a fire, firemen must take orders from a commanding officer.
(T) 5. Some firemen respond to alarms in boats.
(F) 6. Paramedics design and inspect alarm systems.
(F) 7. Arson Investigators put out fires by dropping water from helicopters.
(T) 8. A paramedic may be assigned to a mobile heart unit.
(T) 9. Fire Prevention Engineers read blueprints to determine whether buildings are safe.
(T) 10. Arson Investigators determine the causes of fires.
(F) 11. A fire recruit must have a degree in chemistry or physics.
(T) 12. Some communities pay firemen to go to college.
(T) 13. Good color vision is essential to firemen.
(T) 14. Courses in chemistry and physics help prepare one for a fire-science career.
(F(15. American fire-death rates are the lowest in the world.
(T) 16. Firemen must learn some building code laws.
(F) 17. Firemen have learned to scientifically suppress fires caused by new products.
(F) 18. It is not necessary for a firefighter to be personally likeable.
(T) 19. The need for firefighters will probably grow in the future.
(T) 20. Firemen must be able to handle all types of fire apparatus.
(T) 21. First aid is an important part of a fireman's training.
(T) 22. Firemen inspect factories, theatres, and other public buildings for unsafe conditions.
(T) 23. Small towns often rely on volunteer firemen who only serve when needed.

Unit 16 Promoting the General Welfare

Crossword Puzzle



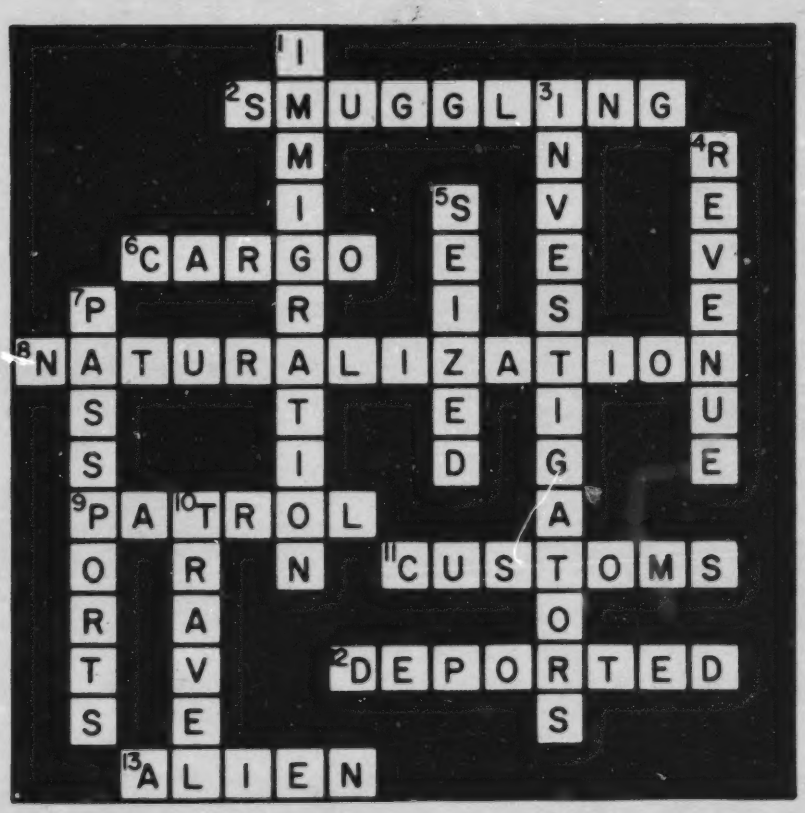
ACROSS

2. Customs agents are the Government's frontline protection against _____.
6. Most of the money collected by customs comes from _____.
8. People who are citizens of other countries can become U.S. citizens by _____.
9. Customs agents _____ the waterfront.
11. The Bureau of _____ inspects cargo and passengers entering and leaving the U.S.
12. Naturalized citizens who prove to be undesirable may be _____.
13. A citizen of another country who is in the United States is an _____.

DOWN

1. People who wish to become U.S. citizens are examined by the _____ and Naturalization Service.
3. Customs _____ inspect airplanes and ships that are entering the United States.
4. Perhaps the main reason for customs is the collection of _____.
5. Exports which may be used to overthrow governments are _____ by customs agents.
7. The Department of Justice issues _____ to Americans who are leaving the country.
10. The increase in _____ has made the Bureau of Custom's work harder.

Answer Key



Unit 17 Fast, Safe, and Efficient Transportation Hidden Elements of Transportation

There are 26 transportation words in this puzzle. Can you find them? Encircle the ones you find — they may run forward, backward, or diagonally.

R	M	S	D	I	B	U	S	N	T	P	C
A	A	P	F	X	O	A	L	R	H	O	Y
C	R	I	E	A	A	M	R	T	G	L	A
G	I	P	L	T	T	N	E	G	I	L	W
S	G	E	C	R	P	L	A	N	E	U	B
K	H	L	I	A	O	N	I	A	R	T	U
C	T	I	H	F	R	A	Y	V	F	E	S
U	O	N	E	F	J	R	D	L	K	T	E
R	F	E	V	I	E	Y	D	O	R	E	T
T	W	L	R	C	A	S	E	E	T	R	R
F	A	O	D	W	R	Y	E	T	U	M	E
D	Y	T	N	L	A	T	P	R	E	I	E
R	C	U	P	W	D	A	S	O	S	N	N
A	R	A	H	R	A	G	O	P	I	A	I
Z	Q	G	L	T	R	C	B	R	O	L	G
A	I	A	R	O	U	T	E	I	A	D	N
H	D	S	M	O	N	O	R	A	I	L	E

Answer Key

1. airport
2. auto
3. barge
4. boat
5. bus
6. car
7. engineer
8. freight
9. gas
10. hazard
11. highway
12. monorail
13. pipeline
14. plane
15. railroad
16. right-of-way
17. route
18. runway
19. street
20. subway
21. taxi
22. terminal
23. train
24. traffic
25. truck
26. vehicle

R	M	S	D	I	B	U	S	N	T	P	C
A	A	P	F	X	O	A	L	R	H	O	Y
C	R	I	E	A	A	M	R	T	G	L	A
G	I	P	L	T	T	N	E	G	I	L	W
S	G	E	C	R	P	L	A	N	E	U	B
K	H	L	I	A	O	N	I	A	R	T	U
C	T	I	H	F	R	A	Y	V	F	E	S
U	O	N	E	F	J	R	D	L	K	T	E
R	F	E	V	I	E	Y	D	O	R	E	T
T	W	L	R	C	A	S	E	E	T	R	R
F	A	O	D	W	R	Y	E	T	U	M	E
D	Y	T	N	L	A	T	P	R	E	I	E
R	C	U	P	W	D	A	S	O	S	N	N
A	R	A	H	R	A	G	O	P	I	A	I
Z	Q	G	L	T	R	C	B	R	O	L	G
A	I	A	R	O	U	T	E	I	A	D	N
H	D	S	M	O	N	O	R	A	I	L	E

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Project Staff

Patrick J. Weagraff, Ed.D. ..... Director
Constance F. Gipson ..... Curriculum Specialist
James J. Lynn, M.S. ..... Curriculum Specialist
Harold M. Blue ..... Senior Editor
Ronald W. Bertoli ..... Illustrator
Miriam Dong ..... Typist
Lillian Deger ..... Typist
Mary Sullivan ..... Typist
Karen Mason ..... Reproduction Typist

GPO 693-477/272

ACCESSION NUMBER: VT102222

PUBLICATION DATE: JUN75

TITLE: ORIENTATION TO PUBLIC SERVICE OCCUPATIONS. CURRICULUM GUIDE.

DESCRIPTOR: *CURRICULUM GUIDES; *PUBLIC SERVICE OCCUPATIONS; *HIGH SCHOOLS; *CAREER EDUCATION; *GOVERNMENT ROLE

IDENTIFIER: CAREER ORIENTATION

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 432P.; RELATED DOCUMENTS VT 102 220 THROUGH VT 102 226 IN THIS ISSUE.

ABSTRACT: THIS CURRICULUM GUIDE IS ONE OF A SERIES DEVELOPED AS PART OF THE PUBLIC SERVICE OCCUPATIONS CURRICULUM PROJECT TO ASSIST IN THE IMPLEMENTATION OF CAREER EDUCATION PROGRAMS CONCERNED WITH PUBLIC SERVICE OCCUPATIONS. THIS GUIDE CONSISTS OF EIGHT UNITS INTENDED TO REPRESENT THE EIGHT MAJOR OCCUPATIONAL GROUPS WHICH REFLECT DISCRETE GOVERNMENTAL FUNCTIONS PERFORMED AT FEDERAL, STATE, AND LOCAL LEVELS. THE EIGHT UNIT HEADINGS ARE: GOVERNMENTAL AGENCY MANAGEMENT; SOCIAL AND ECONOMIC SERVICES; EDUCATIONAL SERVICES; RESOURCES MANAGEMENT; RURAL, URBAN AND COMMUNITY DEVELOPMENT; PUBLIC SAFETY, CORRECTIONS, AND JUDICIAL SERVICES; REGULATORY SERVICES AND RECORDS; AND TRANSPORTATION SERVICES. THE BASIC CONCEPTS AND INSTRUCTIONAL MATERIALS ARE RECOMMENDED FOR THE EXPLORATION OF PUBLIC SERVICE OCCUPATIONS AT THE HIGH SCHOOL LEVEL. THE SUBJECT MATTER IS ORIENTED TOWARD TEACHERS WITH MINIMAL TRAINING OR EXPERIENCE IN PUBLIC SERVICE OCCUPATIONS EXPLORATION. EACH UNIT CONTAINS INSTRUCTIONAL OBJECTIVES, TEACHER INFORMATION FOR COURSE CONTENT, AND SUGGESTIONS FOR TEACHING MATERIALS THAT WOULD BE HELPFUL IN DEVELOPING THE UNIT. EVERY UNIT ALSO CONTAINS TEACHER AND STUDENT ACTIVITIES THAT WILL ENABLE STUDENTS TO DEVELOP AN UNDERSTANDING OF THE ATTITUDES, VALUES, AND CHARACTERISTICS WHICH PERTAIN TO MANY CAREERS IN PUBLIC SERVICE. APPENDED ARE A LIST OF RESOURCE SUPPLIERS AND SUGGESTED EVALUATION QUESTIONS FOR PRETESTS AND POSTTESTS. (AUTHOR/LJ)

CONTRACT NUMBER: OEG-0-71-4780(357)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402. (STOCK NUMBER 017-080-01431-9)

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. VOCATIONAL EDUCATION SECTION.

SPONSORING AGENCY NAME: BUREAU OF OCCUPATIONAL AND ADULT EDUCATION

(DHEW/OE), WASHINGTON, D.C. DIV. OF RESEARCH AND DEMONSTRATION.

VT 102 222

Orientation to Public Service Occupations

VT 102 222

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C., 20402

Stock No. 017-080-01431-9

Orientation to Public Service Occupations

by:

California State Department
of Education
Vocational Education Section
Program Planning Unit
Sacramento, California 95814

in accordance with:

U.S. Office of Education
Bureau of Occupational and
Adult Education
Division of Research and
Demonstration
Curriculum Development Branch
Grant No. OEG-0-71-4780 (357)

June, 1975

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
U.S.A.

This document is one of a series of curriculum guides dealing with the Public Service Occupations career cluster. The titles of all individually available documents in this series appear below:

- Exploration of Public Service Occupations
- Orientation to Public Service Occupations
- Preparing for Public Service Occupations—Common Core
- Preparing for Public Service Occupations—Educational Services
- Preparing for Public Service Occupations—Law Enforcement Services
- Preparing for Public Service Occupations—Social Services
- Administering Public Service Occupations—An Implementation Guide

The project presented or reported herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

Developed pursuant to grant No. OEG-0-71-4780
by the California State Department of Education
Vocational-Technical Education Curriculum Laboratory
Sacramento, California
Funded by the U.S. Office of Education under
Part I - Curriculum Development in Vocational and Technical Education
Vocational Education Amendments of 1968,
Public Law 90-576
1975

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FOREWORD

This Curriculum Guide, *Orientation to Public Service Occupations*, is one of a series developed to assist those involved in implementing career education programs concerned with Public Service occupations.

The Public Service Occupations Curriculum Project staff, in conjunction with a group of nationally prominent persons with expertise in local, state, and federal government, as well as in secondary and post-secondary education, has adopted the following definition for Public Service:

> Public Service occupations are those occupations pursued by persons performing the functions necessary to accomplish the mission of local, county, state, and federal government, excluding the military service and trades requiring an apprenticeship. These missions reflect the services desired or needed by individuals and groups...and are performed through arrangements or organizations established by society, normally on a nonprofit basis, and usually supported by tax revenues.

Examination of the major functions of government, consistent with this definition, suggests its division into eight major occupational groups which reflect discrete governmental functions performed at federal, state, and local levels. This Guide is therefore divided into eight sections, representing these occupational groups. Each section is further subdivided into units of learning, containing the basic concepts and instructional materials recommended for the exploration of Public Service occupations at the high school level.

The subject matter is oriented toward teachers with minimal training or experience in Public Service occupations exploration. Guidance for teaching these materials is presented in the accompanying *Implementation Guide*.

Each unit contains instructional objectives, teacher information for course content, and suggestions for teaching materials that would be helpful in developing the unit. Every unit also contains teacher and student activities that will enable students to develop an understanding of the attitudes,

values, and characteristics which pertain to many careers in public service.

The Orientation Guide materials can be taught as a separate course or infused into the regular program. They have proven effective in team teaching situations. While most of the sections may be taught in social studies classes, included activities may also be incorporated in mathematics, language arts, physical education, and health classes.

The sections are presented in sequential order, although each is designed to stand alone as a separate body of knowledge. All of the information is suggested only, and should be adapted to meet local conditions and needs.

This document was prepared by the California State Department of Education, Vocational Education Section, Program Planning Unit, which was then under the direction of E. David Graf. The major responsibility for the coordination of this guide belongs to Helen M. Nespor, Ph.D., Curriculum Specialist, Public Service Occupations Curriculum Project.

A wide range of suggestions and approaches to the subject were received from consultants representing federal, state, and local governments; professional associations; state-level vocational-technical specialists; faculty members of over eight colleges and universities; and several school districts. Wherever possible, these suggestions were incorporated into the final document.

Since the resulting materials represent many opinions, no approval or endorsement of an institution, organization, agency, or person should be inferred.

Patrick J. Weagraff, Ed.D.
Project Director

ACKNOWLEDGEMENTS

The completion of this career education guide depended upon the assistance and cooperation of over eight hundred persons. The California State Department of Education, Vocational Education Section, wishes to acknowledge in particular the contributions of the following:

Mr. Alvin Beller, Director
Regional Training Center
U.S. Civil Service Commission
San Francisco, California

Mr. Victor Backstrom
Instructor
Jordan High School
Long Beach, California

Dr. William E. Burns
Professor of Education
State University of New York
College at Buffalo
Buffalo, New York

Dr. Ronald L. Detrick
Director of Vocational Education
Long Beach Unified School District
Long Beach, California

Dr. Nevin Frantz
Assistant Professor of Education
University of Georgia
Athens, Georgia

Mr. Elmer George
Executive Director
Georgia Municipal Association
Atlanta, Georgia

Mrs. Nancy Gipson
Personnel Analyst
Internal Revenue Center
Fresno, California

Dr. Edward Hallberg
Professor of Education
California State University
Los Angeles, California

Mr. Alfred W. Koch
Curriculum Coordinator
Rawlins Public Schools
Rawlins, Wyoming

Mr. Andrew S. Korim
Public Service Specialist
American Association of
Junior Colleges
Washington, D.C.

Mr. Donald L. Leach
Lieutenant, California
Highway Patrol
Sacramento, California

Mr. James B. Mayo
Coordinator
Fremont-Newark Regional
Occupational Program
Fremont, California

Mr. Fred Miller, Chief
Public Services Institute
Pennsylvania State
Department of Education
Harrisburg, Pennsylvania

Dr. Thomas Morrissey
Professor of Education
State University of New York
College at Buffalo
Buffalo, New York

Mr. Arden Nelsen
Manpower Administration
U.S. Department of Labor
Washington, D.C.

Dr. William Thomas
Dean, Educational Career Services
University of California
Los Angeles, California

Dr. James Wykle
Educational Program Specialist
U.S. Office of Education
Washington, D.C.

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Section 1

GOVERNMENTAL AGENCY MANAGEMENT

Here are the contents of Section 1 of the Orientation Curriculum Guide. We suggest you read it before you read the text.

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Section 1

GOVERNMENTAL AGENCY MANAGEMENT

Unit 1 Nature of the Field

INSTRUCTIONAL OBJECTIVES

1. Ability to define government (public services) in his own words.
2. Ability to identify in writing two distinctions between federal, state, and local government.
3. Ability to identify 6 of the 8 occupational groups involving government agency management.
4. Ability to name major trends related to government agency management.
5. Ability to describe in one sentence the job families related to government agency management: general, fiscal, contracts, personnel, and public information management.

CONTENT

Public Service Defined. Government or public service is the largest employer in the United States. In 1968, there were 12.2 million government jobs, employing one out of every five persons of the total work force. Governmental public service at the federal, state, and local level, is defined as "those occupations pursued by persons performing the functions necessary to accomplish the mission of local, county, state, and federal governments."

These functions reflect the services desired or needed by individuals and groups, and are performed through arrangements or organizations established by society, normally on a nonprofit basis, and usually supported by tax revenues.

Government Jurisdiction. Public service has several jurisdictions. The federal government operates on the national level;

each of the fifty states are governmental entities; and within each state are county, city, or other forms of government.

The federal government, like other jurisdictions, is the result of people organized for the purpose of preserving peace, promoting security, and increasing the public good. As Figure 1 illustrates, governments in the United States appear figuratively as a series of concentric circles with the federal government being in the outside circle, the state circle next, and then local government (city and county) in the innermost circle:

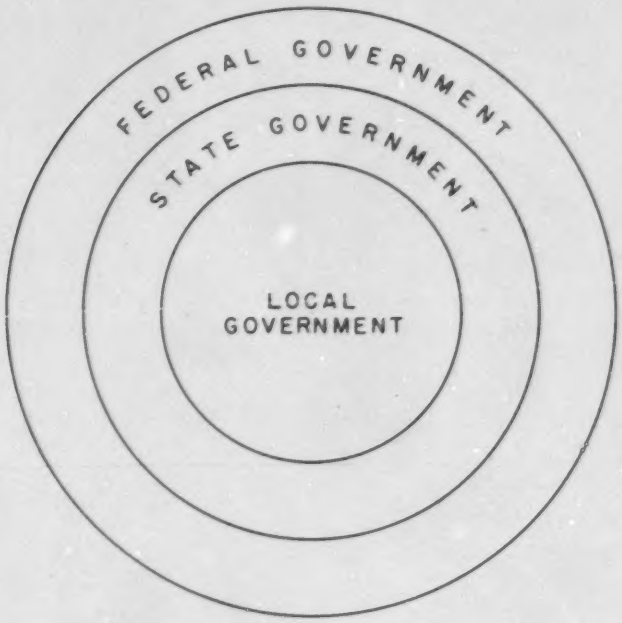

Figure 1 - Relationship of Governmental Levels

Federal Government. The United States government represents, serves, and protects the American people, both at home and abroad. Close to 2,500,000 civil service employees and other workers at home and abroad carry out the programs of the federal government. Although the government headquarters is situated in the nation's capital in Washington, D.C., 90 out of every 100 employees work elsewhere in field service activity.

The United States government makes and enforces laws, collects taxes, provides services for people, protects individuals and their property, and works for national and international security. The federal government borrows money and issues bonds; coins money and prints currency; establishes weights and measures; issues patents and copyrights; controls immigration and emigration; naturalizes non-citizens; operates the postal

system; builds roads and highways; manages a social security system; regulates agriculture, business, and labor; negotiates with other governments; maintains the armed forces; and participates in international organizations to promote peace, health, and education.

The United States operates under a constitution which not only outlines the jurisdiction of government, but also protects the rights and liberties of the states and the people, under the three branches of executive, legislative, and judicial.

Federal Executive Branch - The Executive Branch of the United States government consists of the Executive Office of the President, the Executive Departments, and the independent agencies.

The Executive Office of the President includes the White House Office, the Bureau of the Budget, the National Security Council, the Office of Emergency Planning, the Council of Economic Advisers, the Office of Science and Technology, the National Aeronautics and Space Council, the Office of the Special Representative for Trade Negotiations, and the National Council on the Arts, among other specialized groups.

These Executive Departments conduct the administration of the national government: State; Treasury; Defense; Justice; Interior; Agriculture; Commerce; Labor; and Health, Education and Welfare. Generally, these departments are divided into bureaus, the bureaus into divisions, the divisions into branches, the branches into sections, and the sections into units. Most officials below the highest level serve under civil service appointments.

Independent agencies developed with the growth of government regulation. They operate in the fields of aeronautics and space, atomic energy, banking and finance, civil service, communications, farm credit, home finance, home loans, information services, interstate commerce, labor mediation and conciliation, labor relations, power, railroad retirement, science, securities and exchange, selective service, small business, tariffs, trade, and veterans' affairs.

Administrators and directors head most of the independent agencies, while regulatory agencies are headed by several persons of equal rank, with one quite often designated as chairman.

Federal Legislative Branch - The Legislative Branch of the United States government includes Congress (the Senate and the House of Representatives) and five agencies which provide administrative duties: the Architect of the Capitol, the General Accounting Office, the Government Printing Office, the Library of Congress, and the U.S. Botanic Garden. Congress makes, repeals, and amends federal laws; levies federal taxes;

and appropriates funds for the government. Two Senators represent each of the fifty states, and the House of Representatives consists of 435 members, elected from areas based on population.

Federal Judicial Branch - The Judicial Branch consists of the Supreme Court, some 90 federal district courts, and 11 federal courts of appeals or circuit courts. Federal courts decide cases that involve the Constitution and federal laws.

State Governments. The United States constitution divides powers between the federal and state governments, reserving some powers, however, solely to the states.

State governments provide many services and regulate many activities for the people of a state. They maintain law and order and enforce criminal law. They protect property rights, and regulate corporations. They supervise public education, including schools and state universities. They operate public welfare programs, build and maintain most highways, operate state parks and forests, and regulate the use of state-owned land. State governments have direct authority over the local governments of counties, cities, towns, townships, villages, and school districts.

State governments, like the federal government, also have the three main branches of Executive, Legislative, and Judicial. Each state has a constitution which sets forth the principles and framework of its government.

State Executive Branch - The governor of each state heads up its Executive Branch. He has the power to appoint, direct, and remove from office a number of state officials. He commands the state militia, grants pardons, directs the preparation of state budgets, and works closely with the elected officials of the state in developing and passing state legislation. Other state officials who (like the governor) are elected by the people of a state, include a Lieutenant Governor, Secretary of State, Treasurer, Attorney General, and, in half of the 50 states, a Superintendent of Public Instruction. Departments within the Executive Branch of a state include Education, Agriculture, Labor, Health, Public Welfare, Business, Public Works, and Conservation, among others, although nomenclature may vary from state to state.

State Legislative Branch - The Legislative Branch of a state passes laws, levies taxes, approves of monies to be spent by the state government, and amends the state constitution. Legislators are elected officials who serve either in the State House of Representatives or the State Senate. The members of the House of Representatives are usually known as assemblymen and represent constituencies within counties. The members of

the Senate are known as senators; they represent divisions of population areas within a state.

State Judicial Branch - The Judicial Branch of a state settles disputes which come before them under various laws. There are local courts within cities and counties, Appellate Courts, and, finally, a State Supreme Court. Each state has general trial courts. County and municipal courts include Probate, Juvenile, Domestic Relations, and Small Claims, and the Courts of Justice of the Peace and police magistrates.

Local Governments. Local government includes counties, cities, boroughs, villages, townships, and towns, as well as school districts and special districts. The state creates and has legal control over all local governments. Forms of government in the some 90,000 local units vary from city to city and from county to county. Many cities have a council and a mayor; others have a commission or city manager or elements of both.

Municipalities serve urban areas and have the power to provide police and fire protection, street and traffic control, health and welfare services, and other services necessary to maintain community life. Townships usually serve rural areas and provide many of the services performed by municipalities.

School districts consist of approximately one-half of all local government units. They may encompass elementary schools, junior high schools, high schools, and community colleges.

Special districts, sometimes known as authorities, commissions, or boards, perform one or more functions in regard to such areas as fire protection, soil conservation, drainage, parking, sanitation, and busing. Some districts manage highways, hospitals, libraries, parks, and playgrounds; while others build and operate bridges, toll roads, seaports, airports, and public buildings.

Public Service Occupational Groups. All of the branches, departments, districts, authorities, etc. are headed or led by individuals known as directors, department heads, or managers. Within each of the agencies, there may also be sub-units which have supervisors or managers. Some managers have general administrative capabilities and can provide leadership to a number of different types of organizations, while others must have special skills or knowledge in such areas as education, public health, engineering, recreation, or security (to name only a few fields), to appropriately direct a governmental activity. The management of government organizations has even become an occupational field within public service.

General occupational groups within the public services on the federal, state, and local levels may be divided into these eight divisions:

1. Government agency management. The organizing and managing of the support service units of government organizations and units.

2. Social and Economic Services. Increasing opportunities for social and economic betterment among the disadvantaged, underemployed, and unemployed.

3. Educational Services. Development of individual competencies and intellects.

4. Resources management. Preserving, managing and restoring natural and/or man-made environments within the public domain.

5. Rural, Urban, and Community Development. Planning and organizing various elements for orderly community growth.

6. Public Safety, Corrections, and Judicial Services. Protecting human and property rights as well as resolving related conflicts.

7. Regulatory Services and Records. Organizing and managing regulatory functions of local, state, and federal governmental agencies and organizations.

8. Transportation Management. Reducing the hazards and inefficiencies of congestion in surface and air-passenger cargo flow systems.

These occupational groups are further discussed within this volume, in sections numbered as above.

Major Job Families in Government Agency Management. The eight occupational areas mentioned above all have administrative or management units which can be identified.

Each agency has various management responsibilities. There is the overall management of the agency, management of programs or departments within the agency, management of the financial aspects of the organization, management of the agreements or contracts, management of the personnel activities, and management of internal and external communications.

General management refers to the development and maintenance of objectives for an agency or department and the coordination of the organization or unit to meet the established objectives.

Fiscal management refers to the total management of budgets, revenue raising, fund accounting, and auditing.

Contract management includes contract bidding, administration, and procurement under contract specifications.

Personnel management refers to staffing, personnel recruitment, testing, and employee relations.

The fifth area is public information and relations, which includes the determining of public need and offering information feedback, both inside and outside the government agency.

These five major job families within governmental agency management constitute the administrating, budgeting, contracting, staffing, and informing persons for the public service occupational areas of social and economic services; educational services; resources management; rural, urban, and community development; public safety, corrections, and judicial services; regulatory services and records; and transportation management.

In diagram form, as shown in Figure 2, these occupational areas and job families relate in the following manner:

Figure 2 - Relationship of Occupational Groups

Trends in Public Service Management. Change is the rule in managing government agencies. Today the shifts and trends of public life areas are as prevalent as the changes we generally see in our society. New technology has had a tremendous impact; from packaged foods to television, from purchasing goods with plastic money to travel to the Moon - the impact is significant on the management of agencies organized for public service.

The major shift in government agency management seems to be a transition from dominantly international concerns to those of our cities and ghettos. Recent governmental success in the international arena allows us to be gradually redirected to the domestic affairs of ecology, environment, housing, education, and transportation.

General Management Trends - In general management, the trends toward organizational systems, computer data collection and transmission, have brought greater respect for the special talents, skills, and knowledge of personnel within an organization.

Fiscal Management Trends - A major trend in the fiscal area relates to fiscal accountability. Here a much closer tie exists between dollars allocated and the manner in which they are spent. Those involved in fiscal management are no longer divorced from program development or evaluation - each professional must have a clear conception of the total fiscal process of a program from start to finish.

Contract Management Trends - While a trend of accountability emerges, it is occurring at a time of "belt tightening" throughout the nation. Management personnel today look beyond the mere accounting of funds to methods by which the government can properly and quickly respond to public needs within contracts already allocated and confirmed.

Personnel Management Trends - Several new trends are presently found in personnel management, one of which is the fact that public service management careers are attracting more and more qualified personnel into more and more specialized fields. The personnel management expert is becoming more specialized everyday.

There is also an increasing trend in the work of the government agency personnel manager toward the full range of human needs on the job. Job placement and salary are only two factors in the myriad of work experiences and personnel variables with which the personnel office must deal: environmental conditions, motivation, retraining, attitudinal change, human interaction, and other factors.

Another significant trend involves the inclusion of more

minority persons in the public service work force; still another trend deals with the inclusion of paraprofessionals as full partners in public service careers.

Public Information Trends - In the area of public information, the fifth job family within government agency management, "what government is doing" has become critically important. With high levels of information communication being provided by industry and expected by the public, "what's going on in government" is also a public expectation. The public desires that information about government shall be as close to them and as well done as other information provided them on television or in the newspaper. Public information specialists are also expected to be experts in research. Collection of data about government and the use of such data in intelligent planning is a growing force in public service management.

STUDENT LEARNING ACTIVITIES

- Write an essay comparing the public services on the federal, state, and local levels.
- Define: public service, occupational areas, and job family.
- Find, in the classified ads of the local newspaper, four job advertisements related to each of the five government agency management job families in federal, state, or local government.
- Select one of the five job families (general administration, fiscal, contracts, personnel, or public information) and compare your personal work interests with information about the job family selected on the federal, state, or local governmental level.

TEACHER MANAGEMENT ACTIVITIES

- Utilize five rotational groups to discuss aspects of each government agency management job family.
- Create a bulletin board for current events related to each job family.
- Duplicate job descriptions related to the chief officer of the five related job families and distribute to the class.

RESOURCES

Dictionary of Occupational Titles, Department of Labor, U.S. Government Printing Office, 1965.

Occupational Outlook Handbook, Bureau of Labor Statistics, Bulletin 1650, U.S. Department of Labor. 1970-71.

Encyclopedia of Careers and Vocational Guidance, J. G. Ferguson Publishing Co., 1967.

Handbook of Job Facts, James M. Murphy, Science Research Associates, 1963.

You and the Next Decade, Adrian Alex; Paradis, McKay, 1965.

How You Can Get the Job You Want, Glenn L. Gardener, Harper and Row, 1962.

Federal Government: Plan of Organization, Coronet Films, (Film, color, 14 min., purchase), 1970.

New Career Opportunities, Popular Science, (Filmstrip, color, 40 frames), 1964.

Unit 2 Governmental Agency Management

INSTRUCTIONAL OBJECTIVES

1. Ability to demonstrate some knowledge of the nature, importance, and characteristics of organizational objectives.

2. Ability to demonstrate some knowledge of the relationship between organizational, operational, and individual objectives.

3. Ability to identify the relationship of objectives with the establishment of policies, procedures, rules, methods, and strategies.

4. Ability to describe the major tasks involved in government agency management.

5. Ability to describe the general activities and duties of government agency managers.

6. Ability to demonstrate effective application of principles of supervision under simulated practice conditions.

CONTENT

Historical Development. Modern government agency management began toward the end of the 19th century under the leadership of Frederick W. Taylor, who was called the father of scientific management. Taylor believed production or services could be increased through better and more exact planning. "Scientific" methods were sought, and management tried to find the best way to accomplish a task.

In the 1950's a new approach became popular. Management theorists attempted to use the findings and principles of "behavioral science," (psychology, sociology, anthropology, economics, etc.) to better explain and cope with the actions of individuals within business organizations.

Most recently, with the advent of the computer and the development of new mathematical and statistical techniques, the "management science" approach has gained considerable attention. This approach attempts to apply to behavioral science such rigorous mathematical techniques as operations research for the development of techniques to assist government agency managers in decision making.

The Process of Agency Management. The job of most government agency managers can be divided into the five parts of planning, organizing, controlling, motivating, and communicating.

Planning involves evaluation of conditions in the now and in the future (forecasting), then deciding how to take advantage of these known and anticipated conditions. Planning is the most creative of the government agencies manager's duties; in this activity he must intelligently consider objectives, policies, and strategies:

> *Objectives* are the aims of an organization, giving purpose both to the organization and to the people employed in it. They must be challenging but realistic, so that they will motivate people to achieve them.
>
> Success of the government is measured by the degree and extent to which its general objectives are achieved; the success of the agency manager is measured by the extent to which he achieves his specific assigned objectives.
>
> *Policies* are guides for action for people within the organization. They state the organization's position on many important matters and express the manner in which the agency's objectives should be achieved. To assure that, when ordinary decisions must be made, they will be made the same way and the best way each time, management states in advance how commonly occurring problems should be settled.
>
> *Strategies* are plans that take into account the objectives and policies of the government agency. A typical strategy might be that of an agency that expects the need for its services to increase and, therefore, adds more staff.

Organizing techniques are used by members of the agencies in order to concentrate all the available human and physical resources upon the attainment of objectives. It involves, as it does in a team, the division of duties, and the assignment of authority and responsibility. The manager decides on the members of his "team," their positions, and their individual and group goals.

Good organization optimizes the efforts of everyone to achieve goals, and thus increases group output and effectiveness. It takes advantage of the special capabilities and interests of the people in the agency. Organization changes as people are promoted or retired, as new functions are created, as old functions lose importance, and in many other circumstances, all of which make it necessary to continually reconsider the form of organization to determine whether it is still focused on needs and goals.

Controlling is a process of determining through observation, measurement, reporting, and analysis, whether the agency is carrying out operations according to plan, and if it is not, taking action that will make it do so. The control process involves:

Establishing standards, which may be stated in many ways, quantitatively or qualitatively;

Appraising performances to determine whether or not standards are being achieved;

Correcting deviations. Deviations are recognized as the result of information about how actual performance compared with planned standards.

Motivating is the process of stimulating government agency personnel to achieve given objectives of the organization.

Communications is a central part of the government agency management process. It can be between equals, or directed toward subordinates or to groups outside the agency.

Typical Management Objectives of a Governmental Agency. The development and maintenance of organizational and operational objectives, their structured nature, and the closely related managerial functions of planning and control, are all necessary goals in a government agency no matter what its overall mission.

The management of an agency requires not only an awareness of goal-setting, but knowledge of the functions and utilization of organizing human, physical, and material resources; of establishing and maintaining policy; of decision-making; of communications; of identifying and analyzing issues and problems; of evaluating and rewarding the efforts of employees; and of perpetuating the organization.

Objectives are carried out after carefully made plans have been developed and tested, so that the planning function of the manager is significant. Problems must be resolved through many different means and inputs. The various principles of management patterns of operation (planning, organizing, directing,

integrating, and controlling) must be applied on a daily basis.

The chief administrator of a government agency must also oversee, or have combined in his own responsibilities, the jobs of fiscal, contract, personnel, and public information and relations management. Accordingly, the objectives of each of these functions must contribute to the goals of the particular agency.

A general manager of a department or governmental unit may also be responsible for the specific objectives and the operational achievement of those objectives. He may have the responsibility for some or all of the important areas of fiscal, contract, personnel, and public information and relations.

General Management Activities. Work activities in general management involve planning to meet anticipated objectives, organizing the staff and resources, meeting with representatives of other organizations and agencies on matters of common importance, and resolving issues and problems as they arise.

The responsibilities of budgeting, contract administration, personnel, and public information and relations may also entail the preparation of financial informational documents; negotiating and developing contracts; publicizing, interviewing, employing, and training personnel; and developing both internal and external public information and relations programs.

Managers need good verbal and writing skills. They need organizational ability, and skill in placing personnel in those responsible areas where they can best perform; good decision-making and problem-solving ability; accuracy in making calculations; and an understanding of the functional principles of management in planning and operational activity.

Entry into general management requires the completion of academic course work, and considerable experience in a specialty field within the public service arena. Education in law, business, economics, accounting, or public administration, as well as the physical, biological, or social sciences, may be helpful.

General management is a culmination of many developed skills and exposures which indicate that an individual can handle a high level of responsibility.

STUDENT LEARNING ACTIVITIES

- Organize a panel of public service managers who combine functions of fiscal, contracts, personnel, and public relations in their jobs.

- Choose a public agency and write a report on those objectives and organizational structure which would be effective for it.

- Trace and report on how a plan might be developed to create a city agency to address the problems of pollution, rapid transit, or low-income housing.

- Write job descriptions for a federal agency department head, a state agency manager, and a city police chief.

- Develop and report on the progressive steps, in education and experience, that you should experience to be a general public agency manager in a field of your choice.

TEACHER MANAGEMENT ACTIVITIES

- Provide a chart on the various functions which a manager must perform in a government agency setting.

- Assign the class reports which will familiarize students with different examples of government agency management positions.

- Have a class discussion on the differences between general management, fiscal management, contracts management, personnel management, and public information management in government agencies.

- Have students develop objectives for four different types of government agencies.

RESOURCES

Principles of Management, Harold Koontz and Cyril O'Donnell, McGraw-Hill, 1964.

The Management of Intelligence, Carl Gregory, McGraw-Hill, 1967.

The Management of Organizations, Herbert G. Hicks, McGraw-Hill, 1967.

Organization Theory, William Scott, Richard D. Irwin, Inc., 1966.

Management by Objectives, George S. Odiorne, Pitman, 1965.

How to Manage by Results, Dale McLonkey, American Management Association, 1965.

A Manager's Guide to Making Changes, Arnold S. Judsen, John Wiley and Sons, 1966.

Administrative Action, Wm. H. Newman, Prentice-Hall, 1967.

Unit 3 Basic Components of Governmental Agency Administration

INSTRUCTIONAL OBJECTIVES

1. Ability to explain the purpose and contents of a government agency budget.

2. Ability to explain the responsibilities in the fiscal management of a budget and the flow of monies and property within a government entity.

3. Ability to discuss the similarities and differences between formal and informal contracts.

4. Ability to accurately describe the purposes and types of government contracts.

5. Ability to explain some of the factors in awarding contracts, formal competitive bidding, and informal negotiation.

6. Ability to display knowledge as to who in government makes contracts, when contracts are made, and why they are made.

7. Ability to explain the responsibilities of contract administration within a government agency.

8. Ability to discuss the functions of employee relations and personnel administration as they relate to government agency personnel administration.

9. Ability to construct a typical governmental agency organizational chart depicting line and staff functions of an agency.

10. Ability to assess the types and kind of information needed, required, or desired by the public, about a selected government agency.

11. Ability to identify the types of media available for a government public relations program and how they may be utilized.

12. Ability to discuss the rights of people to information about their government.

13. Ability to recognize and explain the difference between internal and external communication.

CONTENT

Fiscal Management. Government agencies exist for the public welfare. Accordingly, they must be supported by public funds and accountable to that general public which supports them. Sound, honest, and accurate accounting is essential to anticipating budgetary needs, which are under the legislative control of federal, state, or local public office holders.

The public and its elected representatives must know why an agency exists, and how much money, property, material, and human assets it takes to efficiently support the objectives of the agency. This is the responsibility of the fiscal management of an agency, which may include a chief fiscal officer and his staff in addition to the agency department head. Besides regular reporting schedules to evaluate agencies, those responsible for fiscal activity must be prepared, at any time, to make statements as to the financial health of an organization.

Most importantly, they must be aware of the mission of an agency, its goals, and purposes. They must be cognizant of the complete scope of the agencies' programs. They must have established a system of accountability for all monies spent or obligated by the agency through their process of funds control. They must be familiar with the various formats of financial reporting, such as balance sheets, payroll forms, and the like. They must have developed efficient ways in which financial data information could be collected and translated into whatever forms or formats would be necessary at a given time.

In both budget preparation and financial accountability, fiscal management must orient and familiarize operating officials at all levels in the development of their budgets and the recording of their expenditures, and also insure that their knowledge and experience are incorporated in all appropriate fiscal matters.

Not only should political consideration be understood in budget development, but the various practices of governmental accounting offices and their financial auditing and internal controls must also be taken into consideration.

Fiscal management, then, stated simply, is insuring that the necessary funds essential to accomplishing the agency's objectives are obtained and that they are properly expended.

Fiscal management involves planning for anticipated expenditures (budgeting) and insuring that expenditures are spent efficiently (accounting). It involves the principles of accounting, contracts, and statistical analysis to problems of fiscal management, auditing, and the like. Typically, fiscal managers are proficient in devising accounting systems and procedures; in appraising assets properties, and evaluating costing methods, budgetary programs, and monetary risks and rates; and in preparing statistical tabulations and diagrams and financial reports, statements, and schedules for use by governmental officials.

In the federal government alone, of the 115,000 workers employed in accounting and budgeting work, more than 30,000 are professional accountants and Internal Revenue agents. They are employed throughout the government, particularly in the Department of Defense, the Treasury Department, and the General Accounting office.

Contracts Management. Contracts are agreements between two or more persons or agencies to do or not to do a particular thing. They are like treaties between countries. Such an obligation is made only by the will of the parties involved. All rules about the interpretation of contracts are based on the fundamental principle of the plain intention of the contract. Contracts involve two distinct acts: making an offer, and accepting that offer.

Government agencies are involved in contracts of all types: contracts for services; production of goods and materials; jurisdictional agreements; purchase and sale of property, insurance, health, etc.

Almost every governmental agency has agreements with other agencies and with vendors and service organizations; agreements which vary from the repair of office machines to the supplying of rockets for an engine which will carry astronauts to the moon.

Federal, state, and municipal laws require that certain types of agreements always be made as contracts in order to protect the public. Quite often, a government contract to build a bridge, or to install a computer system, will be "put out to bid." This procedure enables other organizations or companies to estimate costs and procedures necessary to achieve the objectives of, for example, completing a bridge between two bodies of land, or developing a computer system. When these

estimates are made, a "bid" is submitted to the appropriate agency. The agency then decides which bid or proposal will best achieve its purposes in the most fiscally efficient manner, and "awards" a contract.

Contract or project administrators are usually responsible for insuring that all aspects of contractual agreements are fulfilled on a scheduled basis. They must be familiar with contract law and general governmental policies affecting government contracts. They must know about all types of contracts, the bidding process, and the political implications of governmental contracts. They must be familiar with proposals, grants, and systems of matching funds, among other techniques in contract administration.

Contract management and administration also involves the monitoring and evaluation of ongoing contractual agreements.

Personnel Management. Personnel management is concerned with all factors in dealing with agency workers. The area is usually divided into the two parts of employee relations and personnel administration:

Employee Relations. An agency's dealings with the employees as an organized group, generally as an association or union, may be divided into bargaining (negotiating) and settling grievances (disputes).

Bargaining consists of negotiations between representatives of agency management and the associations or unions to determine the conditions of employment relative to such matters as hours, working conditions, vacations, seniority, and fringe benefits. Negotiating involves each side in attempts to gain the most favorable possible conditions for itself.

Frequently, complaints are made by union or management people concerning the actions of the other side. Therefore, most contracts specify a specific procedure to handle such problems.

Such disputes can arise as the result of many possible reasons -- grievance by workers, disciplinary action by management, disagreements about contract interpretation, failure to negotiate a contract -- any one of which can result in some form of involvement by personnel managers.

Personnel Administration. Personnel administration deals with the procurement, development, and maintenance of workers, and with wage and salary administration. The "personnel department" is a staff

or advisory group that helps the operating agency manager by advising and counseling on good personnel practices; supplying various personnel services; keeping adequate records and reports; and conducting training, safety, and service programs.

Personnel management involves the identification of people's skills, attitudes, and knowledge, and their assimilation into the needs of the organizational unit. It requires communicative skill, respect for the individual, and an awareness of the functional responsibilities of an organizational unit. It involves such activities as recruitment; testing; job analysis; merit and salary regulation; training; placement and maintenance of employee records; provision of employee services; staff transfer, termination and retirement; and many other important functions.

Personnel managers must be thoroughly familiar with the Civil Service system on the level in which they are engaged. They must have knowledge of the various levels of entrance into and the means of advancement within government agencies. They must be aware of merit systems and of personnel costs in relationship to total agency budgets, and familiar with all aspects of manpower, utilities, training, and development.

Public Information/Relations. The management function of public relations aims at molding and expressing the character of an enterprise so that it earns public acceptance and respect. The day has passed when government can ignore public relations. Management must seek to interpret the nature and the aims of an agency, so that the community that controls or influences its fate may recognize it as beneficial. Consequently, management must examine the desires, the needs, and the attitudes of the public to the extent that they can develop for the agency policies and operations in the common interest of the enterprise and of society.

Publicity is a major instrument of public relations. It is the effort to interpret an agency to the public in such a way that the public may gain understanding of the nature of its work and how it serves society.

Like leadership, good public relations is an art. It deals with the minds of men. It seeks to know how men think, and how they will react to the words and deeds of government. Yet there are no exact yardsticks for predicting human attitudes. Agency management, like all human beings, must rely heavily on its own social conscience and it must act so that it could justify its deeds before its own conscience and before the world. Publicity should interpret the action of the business. How else should people learn about the achievements and

offerings of an agency? But sometimes it may be good public relations policy to keep silent and to avoid publicity. It is often a question whether speaking up or keeping quiet will help achieve the objectives of an agency.

As all other agency objectives, the attainment of a favorable public opinion must be sought by planned efforts. This requires a staff of people with a broad range of skills in the area of public relations. In government, officials responsible for achieving such objectives are usually known as Public Information Managers, Directors, or Officers. They plan and conduct public information programs designed to procure publicity through such media as newspapers, magazines, radio, and television. They select and assemble appropriate material. Quite often, they write feature articles, position papers, and other communicative documents. As the name connotes, Public Information officials inform the public.

Their work involves planning and conducting information programs; utilizing such media as radio, television, newspapers, magazines, professional journals, pamphlets, and other communicative means to disseminate information; scripts, speeches, spot announcements, and other informational material; and soliciting and approving photographic and art work, such as signs, posters, or displays.

There may also be the responsibility for preparation of organizational publications, editorial direction, and the planning of special exhibits, lectures, and other activities and gatherings which create good will and contribute to a favorable public image.

STUDENT LEARNING ACTIVITIES

- Organize a series of speakers to serve as resource persons in various aspects of fiscal management; i.e., income tax agency, Federal Franchise Board, government accounting office, business license bureau, etc.
- Visit a financial manager of a government organization to learn how proposed budgets are developed and submitted to higher authorities, and how budgets are reviewed and combined at successive levels until ultimately a presentation is made to a legislative body.
- Formulate a simplified budget for a fictitious agency.
- Prepare a brief oral report on the costs of manpower to a typical government agency.
- Find a copy of the U.S. Budget for environmental problems and write a short report on the relationship between the allocation of funds and their actual distribution.

- Identify a significant fiscal need of a state agency which will soon be presented to the State Legislature, and role play with two other students the positions of the agency head, of a State Senator, and of the Governor.

- Prepare a list of at least 10 different position titles of individuals in government fiscal management.

- Organize a briefing by a government agency contract administrator concerning the negotiation and approval of contracts.

- Simulate, from start to finish, the purchase of an item for a government agency.

- Develop a project whereby one group of students creates a situation in which a contractual agreement must be made by a vendor, another group designs a simple contract to meet the needs, and several students act as vendors bidding on the job.

- Visit a city attorney's or contract attorney's office and question him on the various requirements of a contract.

- Collect and study copies of contracts from government agencies.

- Prepare a list of at least ten different kinds of contracts in which a typical government agency at the federal, state, or municipal level might be involved.

- Prepare an oral report describing either the federal, state, or municipal civil service system.

- Prepare an organizational chart for a selected governmental agency.

- Visit and report on an agency on each level of government to identify personnel practices and how they are put into effect.

- Using a hypothetical government agency as a model, develop a report on how you would determine guidelines for an effective employee/public relations program, and how you would work with each medium (radio, television, newspaper, etc.).

- Prepare news information bulletins and stories for selected media on an existent federal, state, and local agency.

- Write a memorandum to the employees of a particular government agency explaining the ways in which staff reductions may have to occur because of a decrease in the budget.

- Organize a newsletter for the school on the activities of the class in Basic Introduction to Government Agency Public Information/Relations Management.

TEACHER MANAGEMENT ACTIVITIES

- Collect and make available to students information about federal, state, and local government job opportunities, as well as application forms, samples of tests. and other materials.
- Prepare a chart which describes the personnel process from the determination of a position becoming available to placement within that position.
- Develop class opportunities and simulations which will expose students to basic behavioral science principles as they apply to leadership and supervision.
- Have each student prepare a resume and select a position announcement in which he might be interested. Have students interview one another for positions.
- Identify resource people who can either visit the class or to whom class members may go to learn about personnel activities.
- Assign a series of reports which will enable students to understand the purposes, methodology, and terminology in the public information/relations field.
- Provide information on issues and problems in government public relations.
- Collect and make available to students different types of public informational tools, such as press releases, brochures, annual reports, etc.
- Prepare a chart which exhibits the circular flow of funds from the public, through a large government agency, and back to the public in both various forms of service and through staff personnel, vendors, and other recipients of governmental expenditures.
- Assign to each student or a group of students, a government agency on which to report the fiscal activity.

RESOURCES

"Congressional Directory, 92nd Congress, First Session," U.S. Government Printing Office.

Modern Public Administration, F. Nigro, Harper and Row. 1965.

Public Administration in Modern Society, Carson and Harris, McGraw-Hill, 1963.

Business Management Handbook, 2nd edition, J. K. Lasser, McGraw-Hill, 1960.

Principles of Management, G. R. Terry, Richard D. Irwin, Inc., 1964.

Handbook in Everyday Law, M. Ross, Harper and Row, 1969.

Business Law, George Getz, Prentice Hall, 1969.

Federal Government Spending, Tweedy Transparency, (Transparency, color), 1969.

Federal Government Taxation, Tweedy Transparency, (Transparency, color), 1969.

Government Budget Making, General Electron Laboratory, (Audio Tape Reel), 1969.

United States Government Contracts and Subcontracts, D. Paul, American Law Institute, 1969.

Government Contracted Business, General Electron Laboratory, (Audio Tape Reel), 1969.

Purchasing Handbook, George W. Algian (editor), McGraw-Hill, 1966.

Principles of Personnel Management, 2nd edition, Edwin P. Flippo, McGraw-Hill, 1966.

Handbook of Personnel Management and Labor Relations, Dale Yoder, G. H. Heneman, John Turnbull, and Harold Stone, McGraw-Hill, 1965.

Personnel Interviewing, Felix, Copez, McGraw-Hill, 1966.

Handbook of Occupational Groups and Devices of Classes, U.S. Civil Service Commission, Bureau of Programs and Standards, U.S. Government Printing Office, 1968.

Effective Public Relations, S. M. Cutlip and A. H. Center, Prentice Hall, 1964.

Public Relations Handbook, P. Lesley (editor), Prentice-Hall, 1963.

Public Relations and the Line Manager, T. Wright and H. S. Evans, American Management Association, 1964.

Communication Through Letters and Reports, 4th edition, J. H. Manning and C. W. Wilkinson, Richard D. Irvin, Inc., 1967.

The Technique of Clear Writing, Robert Gunning, McGraw-Hill, 1961.

The Problem, Brandon Films, (Film, color, 16mm, 13 min.), 1966.

Unit 4 Functions and Duties of Workers

INSTRUCTIONAL OBJECTIVES

1. Ability to discuss the general responsibilities of managers in public service organizations.

2. Ability to identify three job roles which exist in each of the five government agency management job families.

3. Ability to compare and contrast the general duties of managers at the federal, state, and local levels.

4. Ability to demonstrate some knowledge of the upward mobility of individuals in different governmental areas into management positions.

CONTENT

Managers in Government Agency Service.

What are managers? The Dictionary of Occupational Titles suggests that manager is "a term applied to employees who direct supervisory personnel to attain operational goals of an organization or department as established by management." Department Head and Superintendent are terms used synonymously with Departmental Manager. Managers, in a practical sense, are those individuals who have been designated as managers by higher authority.

What managers do. Managers are involved in the goal-setting of a governmental organization; they develop and maintain organizational activity; they establish and review policies and practices; they assign the various levels of decision-making; they oversee the communicative aspects of the organization; they evaluate programs and people; and they are responsible for the total effort of an organization, its record-keeping, and its efficiency and effectiveness.

The roles of managers in government agencies are diverse. Their activities depend on the type of work in which the agency is involved, and the phases of that work in which they are concerned. Each agency has one or more subdivisions, each headed ordinarily by a manager whose responsibilities are determined by such factors as mission of the unit, number of personnel, and level of decision-making.

Becoming a manager. Managers in the public service just "don't happen." They are ordinarily individuals who have risen through the ranks of a particular specialty area or department. Police chiefs usually begin as patrolmen or investigators, school superintendents began as teachers, many budget directors start as accounting staff members, public welfare department supervisors have begun as social workers, and so forth.

The "spurs" of the manager are usually "earned" through having been hired initially on the basis of specialized education and/or experience appropriate to a particular department or field, and gaining expertise through direct work exposure and increasing kinds of supervisory and administrative responsibility. Rarely do individuals begin their public service careers as managers, even those who have college degrees in public administration. The vast number of governmental employees up to the management level are in specialized services rather than pure management.

Additionally, managerial and official occupations differ in the personal traits required to perform the varied types of supervisory responsibilities. Some fields require the knowledge and skills which one develops through college training. Others may depend primarily on the individual's experience without much regard for an academic specialization.

However, the basic qualities of responsibility (such as integrity, loyalty, honesty, reliability, and effective working relationships with and for whom one works) are essential.

Job Families. There are several major areas of management concentration which may be considered as job families, either separately or in combination with one another. These government agency management job families are: (1) general management, (2) fiscal management, (3) contracts management, (4) personnel management, and (5) public information or relations management. In a large public service agency or department, these management jobs might be separate. In a small governmental unit, all of them or most of them might be combined.

General Managers (or, simply, "Managers") would be those managerial personnel who oversee large governmental units or all of the unit's management functions, plan and develop objectives,

and direct the organization toward the fulfillment of those objectives in prescribed ways.

Fiscal Managers: those managers who are involved in the application of accounting and budgeting principles to problems of financial management.

Contracts Managers: managers who examine, authenticate, maintain, and prepare contracts.

Personnel Managers: managers who organize and conduct programs of recruitment, selection, training, promotion, welfare, safety, compensation, recreation, and other employee relations activities.

Public Relations Managers: those managers who attempt to promote and create good will and understanding by developing information and releasing it through various communications media.

Benefits for Government Agency Managers. Generally, government agency managers are compensated as they might be in private business or industry. However, commerce usually offers fewer restrictions in earning power, since profit-sharing, incentive bonuses, and commissions are possible, and salary scales are usually quite flexible.

Federal government employees are paid under G.S. (Government Service) rankings. A manager of a small administrative unit might earn from $9,053 to $11,771 as a GS-7. The department head for fiscal affairs of a medium-sized agency might, as a GS-12, be paid between $15,866 and $20,627; while a top national agency administrator would draw a salary of approximately $33,000. Managers at various levels would fall within these ranges, depending on their GS rating, which is determined on the basis of service, education, and level of responsibility.

On the state level, the Governor of California earns approximately $49,100, the Lieutenant-Governor $35,000, and high state officials between $22,000 and $30,000. Managers of small state departments and agencies would earn upwards of $18,000. While this is only one state, it is typical of several others.

In local government, salaries vary enormously. School superintendents earn from $12,000 to $45,000, depending on the size of the school district served. City managers receive comparable salaries which reflect the size and complexity of their responsibilities. Other county, town, city, and district officials receive salaries commensurate with their status and the size of the constituency served.

Insurance plans, health programs, vacations, study opportunities, and other benefits are available to government employees.

Government employees, including those in management capacities, are usually required to work 40 hours per week. Employees who work overtime are compensated financially or in compensating time. Managers, however, may work additional hours without compensation, since it is assumed that such time allocation is part of the manager's responsibility.

STUDENT LEARNING ACTIVITIES

- Discuss in class the different work roles which government agency managers perform.
- Visit a federal agency, a state agency, and a local government agency, and discuss with those in management capacities their reponsibilities and activities.
- Select an area or government agency of particular interest and write an essay on the functions and duties of the chief administrator.
- Identify and invite to address your class a government agency manager who will be able to review his own development and preparation for this current management responsibility.
- Organize a program with a panel of government agency managers (one or more each from the federal, state, and local government levels) to respond to questions from the class.

TEACHER MANAGEMENT ACTIVITIES

- Arrange mock job interviews. Divide the class into two groups, with one group acting as potential job applicants, and the other group as the employer-interviewers. Students should prepare questions and conduct mock job interviews on the role, duties, and conditions of a government agency job family.
- Conduct interviews as stated above and, if possible, videotape interviews, playing them back to the student participants, who in turn will critique interviews.

RESOURCES

Management of Human Resources, Paul Pigors, Charles A. Meyers, and F. T. Malin, McGraw-Hill, 1964.

Management and Organization, Louis Allen, McGraw-Hill, 1958.

How to Select and Develop Leaders, Jack W. Taylor, McGraw-Hill, 1962.

Staff Development, the Supervisor's Job, U.S. Department of Health, Education and Welfare, 1963.

The Blue Book of Occupational Education, CCM Information Corporation, 1971.

Supervisors in Action: Developing Your Skills in Managing People, J. Famularo, McGraw-Hill, 1961.

Administrative Office Management, John J. W. Neuner and B. Lewis Keeling, South-Western Publishing Company, 1966.

Principles of Personnel Management, Edwin B. Lippo, McGraw-Hill, 1961.

Paraprofessionals and Their Performance, A Survey of Education, Health and Social Service Programs, Praeger Publishers, 1971.

Work and Motivation, Victor H. Vroom, John Wiley and Sons, 1964.

Follow the Leader, H. Strauss and Company, (film, 27 min., color, free loan), 1968.

Unit 5 Employment Qualifications

INSTRUCTIONAL OBJECTIVES

1. Ability to discuss job qualifications, including age, experience, education, and special aptitudes and values for at least two government agency job families.

2. Ability to discern the difference in management job qualifications for positions at the state and local levels, as well as the federal level.

3. Ability to discuss the similarities and the differences between a four-year degree, a community college degree, a professional degree, and a liberal arts degree.

CONTENT

Many combinations of skills and knowledge are necessary to be an effective governmental manager. The skills needed to manage a small unit as opposed to a large one, or those necessary to organize a project as opposed to an entire office, will differ greatly. Therefore, qualifications depend on the specific position and the level of the position in the management organization. The best way to describe qualifications for these job families is to look at each one separately.

General Management. At this level, a knowledge of the organization and its operations is required, rather than a scientific, technical, or administrative specialty. Generally speaking these are "line" positions, in contrast to "staff" or "specialist" ones. This would include federal agency superintendents, and executives in other governmental organizations, such as City Manager, Director of a state education program, or Secretary of Labor.

In this case, age is a consideration only in terms of how it relates to one's general experience. Generally, in this case,

the general management position is attained after at least 8 or 10 years with an organizational unit at lower levels.

Educational background can be general. A four-year college degree is expected, which would probably include educational training courses in public administration, personnel, fiscal and public information. Degrees in Public Administration, Business Administration, or Public Relations, as well as those in the general liberal arts, are quite often held by managers in this area.

The manager's principal experience should have been at one or two of the levels directly below the general management position, where the ability to plan, initiate, and execute programs would have been required and experienced. Experience as a manager of a total sub-program is often desired. A numerical facility to analyze and use statistics and maintain agency production, inventory controls, and records is also desired, together with leadership qualities, verbal facility, and an ability to get along with people. Experience in extracurricular activities as a part of one's education, as well as involvement in civic activities, is also helpful, such as chairman of charity drives, etc.

Fiscal Management. In this job family, a good education is an absolute necessity. A bachelor's degree in Accounting and Business Administration or Public Administration is usually the minimum requirement for entry into this work. Adequate academic preparation should include courses in all phases of accounting and statistics. Other desirable courses include personnel management, marketing techniques, money and banking, investments, insurance, taxation, and contracting.

Most governmental agencies require the public accountant certification for those who deal regularly in this area of accounting and auditing.

Prior experience seems less important in this field than in others, and educational background appears to be paramount. Experience in positions such as budget analyst, claims adjustor, purchasing officer, or administrative assistant, allows the employee to work up to valuation engineer, or budget officer.

Attainment of a position with supervising responsibility usually requires several years of work in less complex jobs. At these higher levels employers stress strong interpersonal relations and more generalized knowledge of the operations.

These positions require an ability to concentrate for long periods; good verbal expression; organizational ability, speed,

and accuracy in making numerical determinations in detail; and an ability to understand the principles of accounting, statistics, and fiscal management.

Contract Management. Unlike fiscal management, contract management requires persons with more experience, thereby usually someone somewhat older. Certain entry level positions are available to the new graduate, but generally public service contract management seems to require more experience.

Persons enter this work only after acquiring considerable academic experience. Generally, a law degree is preferred for contract negotiation. Other positions in contract management require business or liberal arts degrees.

Employers also consider the individual who has achieved a high degree of proficiency at less complex work, provided he has been exposed to documentary terminology and contract regulations. A well-blended combination of personal contacts of the individual and control of the technicalities and intricacies of the particular field or environment is most important. Only after considerable exposure may a person be expected to function at full capacity.

Operationally, contract management requires a specific combination of enjoying public contact; an ability to understand contracts, their laws, and insurance terminology; reading comprehension and conversational agility; and a sensitivity to the attitudes and reactions of others.

Personnel Management. Age does not seem to be a factor in personnel management. Inasmuch as persons enter personnel management from either technical or other fields, age requirements seem less. Moreover, many persons enter personnel work as clerical or technical support personnel and work up through the career ladder. Therefore, entry age can be 18 or older.

The diversity of requirements necessary to recruit personnel, to be involved in employer-employee relations, and to counsel employers who have personal problems, make educational background requirements diffuse. Many personnel workers hold degrees in Industrial Psychology or liberal arts degrees in other areas. Generally, however, a four-year college degree is required.

Experience patterns are varied in this job family. Background in the roles and duties of one or more of the other job families discussed previously, is an asset in personnel management. Futhermore, experience in work at lower levels is applicable. Moreover, training in other related job families, such as

fiscal and public information management, is sometimes important.

Employers in this area place strong emphasis on personal qualities which contribute to effectiveness in interpersonal relationships when selecting and working with other personnel. Further, the ability to communicate with those with whom one works is imperative. The verbal facility to converse with people, to put them at their ease, and to gain their confidence, is greatly desired.

Essentially, the good personnel manager is a rare combination, for it is necessary that he should be an informed and skillful administrator, and also a person with the highest concern for the individual employee or staff member.

Public Information. For the information gathering, organizing, and verifying functions, a high school education with emphasis on commercial courses is sufficient, although some employers prefer college work in this area. For the dispensing of public information, a liberal arts degree is generally required. Still, persons with other education and personal qualifications may find opportunities in this area.

Experience for those in this job family generally includes newspaper writing, sales work, or public speaking, and/or community or industrial relations.

For the entry-level person, qualities and initiative in extracurricular activities in high school or college seem desirable. Part-time retail sales also seem to be related here for the entry-level person.

It is desirable to have the ability to understand and apply the principles of advertising, publicity, and consumer and market research; and to have the verbal facility and writing qualifications which allow clear and concise communication. The ability to organize surveys and campaigns is also helpful; self-confidence, unique and creative descriptive capability or organizational ability for various media, are also important capabilities.

STUDENT LEARNING ACTIVITIES

- Have each student prepare a job qualification statement for a position within one of the job families discussed.
- Each student should list two elements of education, aptitudes, and values related to each job family discussed.
- In a role-playing session, one-fifth of the students should describe their new jobs as contract managers to friends

they meet on the street; another group, for fiscal management; and other groups should do the same for personnel and public information management.

TEACHER MANAGEMENT ACTIVITIES

- Invite a public service manager from each of the five job families to your class to discuss with the students their jobs.
- Utilize role-playing in personnel management. Have students role-play problems of staff job satisfactions, retirement, compensation inadequacy, and separation.
- Take the class on a walking field trip to neighborhood businesses to discover persons in the five job families.
- Have students write a paragraph on each job family. Allow them to present it to the class as if the writer represented an employer in that job family and was attempting to convince a high school class of its merits as an occupation.
- Divide students into four groups; group #1 to compare age requirements for the five job families; group #2, educational requirements; group #3, experience requirements; group #4, aptitudes and values. Each group should then report to class their findings.
- Take class to the library for review of some of the following resources:

RESOURCES

Government Budgeting, Jesse Burkhead, John Wiley and Sons, 1956.

Cost Accounting - A Managerial Emphasis, Charles T. Horngren, Prentice-Hall, 1962.

Dictionary of Occupational Titles, U.S. Department of Labor, Government Printing Office, 1965.

Encyclopedia of Careers and Vocational Guidance, J. G. Ferguson Publishing Co., 1967.

Handbook of Job Facts, James M. Murphy, Science Research Associates, 1963.

American Science Manpower, National Science Foundation, 1962.

Government Careers and the Community College, Andrew Korim, American Association of Junior Colleges, 1971.

Unit 6 Employment Prospects

INSTRUCTIONAL OBJECTIVES

1. Ability to define and explain the differences between a growing set of job opportunities and replacement job opportunities.

2. Ability to distinguish between federal, state, and local employment trends.

3. Ability to describe one job at each opportunity level (federal, state, and local) within each of the five job families discussed.

4. Ability to relate two statistics regarding one of the opportunity levels (federal, state, and/or local).

CONTENT

Within a framework of an overall increase of 25% in manpower requirements between 1964 and 1975, significant changes are expected in the rate of growth in individual industries. For example, almost all of the industries in the service-producing sector are expected to show substantial growth. By 1975, employment of professional and technical workers may increase by well over 40%. While increased numbers of professional positions become available, employment expansion for managers will proceed at an average rate throughout our economy.

Federal Level. Employment by the Federal Government has remained at much the same level over the past decade despite the expansion of many existing federal programs and the launching of new ones. Federal employment reflects the drive for greater economy and efficiency in government operations, provisions for state and local government implementation of much of the new federal legislation, and great advances in automatic data processing. Because of these developments, federal employment is

expected to remain substantially stable in the foreseeable future.

The new jobs will be oriented for white-collar occupations - ten new jobs in this category for one of a clerical nature. Mathematics occupations will continue to grow, but those related to engineers, accountants, and medical occupations will show only small increases. An average growth of 20% is anticipated in the administrative area. More than a third of this growth will take place in the computer and management services, with engineering support services another major source of expansion.

Positions in environment control and protection work and those in consumer protection are of particular new interest in growing occupational fields related to public service management. Many of these positions will be in air and water quality control system management.

State and Local Level. State and local government employment has grown markedly in recent years, in response to a marked growth in population, and consequent expansion in education and other services. Over the last ten years, the number of state and local government employees has increased by 50%; this increase represents a significant number in the total of new jobs in our economy.

Many of these increases are due to the increasing complexity of urban living. Additional services in traffic control, police and fire protection, and enlarged sanitation services, account for part of this increase. Of all state and local employees, over half are employed in the field of education, while 11% are in health and hospital activities, 8% in highway activities, and 5% in police protection.

In the future, trends indicate that state and local government should increase by more than a fifth, and exceed the number of federal employees by a ratio of 4 to 1.

City governments, particularly, have manpower shortages, not only in growing fields (physicians, members of the health professions, technicians, and social workers) but also in new occupations, such as city manager and city planner.

STUDENT LEARNING ACTIVITIES

- Prepare a report on the prospects of management opportunities in the public service during the next decade.
- Represent a federal, state, or local personnel board and describe the existing job market to your class.

- Write persons from each jurisdiction (federal, state, and local), and invite a representative of each to appear at a class panel.

- Collect lists and descriptions of at least ten management level government jobs.

TEACHER MANAGEMENT ACTIVITIES

- Have each of five groups of students designate a job family. Each group should write a local, federal, and state personnel boards for a list and description of opportunities in that job family.

- Assist students in organizing a volunteer public service management project. This project may require several weeks or a concerted effort over a few days.

- Organize an advisory board of local public service management personnel from each of the five job families -- general, fiscal, contract, personnel, and public information management, and assign three students to each advisory board member. Students should visit and discuss job opportunities with the members of the advisory committee.

- Organize a public service management career day. Invite and offer a booth to each agency, where it may discuss its operation, and display its descriptive and educational material to students in the entire school.

RESOURCES

Occupational Outlook Handbook, Superintendent of Documents, U.S. Government Printing Office, Bulletin No. 1650, 1970-71.

Employment and Earnings, Bureau of Labor Statistics, U.S. Department of Labor, 1970.

"School Dropouts in Big Cities," School and Society, New York, 1964.

How to Structure Job Tasks for Training the Disadvantaged, National Service League, 1970.

Section 2

SOCIAL AND ECONOMIC SERVICES

Here are the contents of Section 2 of the Orientation Curriculum Guide. We suggest you read it before you read the text.

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Section 2

SOCIAL AND ECONOMIC SERVICES

Unit 1 Nature of the Field

INSTRUCTIONAL OBJECTIVES

1. Ability to identify at least five problems handled by social and/or economic agencies.
2. Ability to describe the major goals of social and/or economic agencies.
3. Ability to identify the major job families in social and economic services, as well as to describe the nature of the work for each.
4. Ability to describe the three "basic types" of social and economic agencies found in government today.

CONTENT

Social and Economic Services. The field of social and economic services has to do with society's attempt to find answers to such questions as:

- What will happen to a person and his family if for some reason he can't work?
- Suppose a person gets sick or too old to hold down a job?
- What if there are no jobs available?

Social and economic work is concerned with service to people as individuals, in groups, and in communities, with the goal of helping people to function effectively in today's world. Such work is usually performed in a social or economic agency, or in a social services department of an institution.

The provision of social services is the response of these agencies or departments to the requests for help of those people (usually called clients) who have certain problems that they feel they cannot solve or handle without assistance. The clients do not usually pay for these services. Instead, the need for services has been recognized by the community and financed primarily through taxes or, less frequently, through private donations.

Social and economic agencies offer concrete or "bread-and-butter" services, such as money or housing; they also provide aid in the form of counseling. Actually, the two types of services are seldom entirely separate. For example, people often need considerable counseling when they apply for financial aid to a Department of Public Assistance, because they feel defeated, discouraged, or ashamed. A worker's primary task may be to help them prove their eligibility for assistance -- that they meet the various regulations that are required of recipients. But the worker can also, by what he says, by the warmth he shows, and by his interest in the client as an individual, help him to feel better about himself and his problems.

Major Job Families. Social and economic services incorporate the four major job families of counseling, assistance, rehabilitation, and employment.

These job families are concerned with increasing opportunities for social and economic betterment among the disadvantaged, underemployed, and unemployed.

Problems Handled by Social/Economic Agencies. There are many types of problems for which clients seek social and/or economic service; however, some of the most common types of problems handled by such agencies are included in these categories:

Housing problems, including apartment seeking; eviction or threatened eviction; homelessness; overcrowding; high rent; and vermin or other unsanitary conditions.

Economic problems, including insufficient income; debts; garnishment; budgeting and money management.

Employment problems, including entry into job market; vocational or job training; employment barriers, including physical handicaps, emotional illness, retardation, prison background, or drug abuse history.

Practical-personal problems, including physical or mental health; physical handicaps; family planning; child care; school adjustment; out-of-wedlock pregnancy; police action; probation; or parole.

Grouping of Problems. These various problem types are frequently encountered as a group of related problems in a single individual. A breadwinner whose major problem is severe illness may also lose his job, which will probably cause financial problems. He may, as a result of his inability to support his family, become severely discouraged and depressed. His marital relationship may suffer, and the stability of his home may be threatened. Some of his children, upset by the changes in home life, may begin to have problems at school, such as truancy or academic failure. Thus a tragic chain of circumstances creates great stress in the individual.

Problems such as these have to be considered in relation to such general social conditions as the availability of employment, racial and ethnic discrimination, or the quality of education. The lack of a high school diploma, for example, may or may not be a problem, depending upon the availability and requirements of jobs in the community. In the past, much unskilled work was available for persons with little education, but now greater skills and more education are required for many jobs.

Understanding a Problem. This involves knowing how most people tend to handle the type of situation involved, or what is considered "normal" or customary behavior under the circumstances. Even if a person respects the right of others to be different providing they do no harm to others, this difference or deviance from the normal sometimes becomes a problem because of the community view of such behavior. For example, the behavior of newcomers from rural areas may differ from the behavior of the majority of city dwellers. It is important for workers in the social and economic services to recognize that behavior which is considered normal among the group they serve, and to help clients handle those problems resulting from the differences between their customary behavior and that which the community expects.

Goals of Social and Economic Services. Discussion of an agency's goals or purposes usually has reference to the reasons for its establishment, or the goals that have been developed during its years of service. For example, some settlement houses may have been founded to help European immigrants adjust to American life; now that the former newcomers and their children have moved out of the neighborhoods where the

settlements are located, the facilities are faced with either moving with them or serving new residents of the neighborhood. Because times have changed and the new groups have had different prior experience records, the settlement houses have to develop new goals if they are to now provide adequate help. Even if the facilities move with the older groups, their goals would change because their former clients have also changed. Sometimes an agency continues to hold onto its old aims when they are no longer suited to present-day problems in the community.

Agencies usually have long-range as well as immediate goals. As an instance, a public assistance agency has as its immediate goal the provision of financial help for people who would otherwise be without income; but its long-range goal may be to help the clients become self-supporting. Sometimes these short- and long-term goals may be in conflict because allowances are so low and receiving them is so humiliating that people's health and self-respect suffer, and they have little incentive to seek work. As a result, they become less capable of the independence and self-support that is the goal of the agency. Most professional people in social and economic work agree, however, that both long- and short-run goals can best be served by generous allowances offered in a spirit of respect and trust for the applicants.

Public Agencies. Most workers in social and economic services are employed in public social agencies which were established either by city, state, or local governments, or as a result of some legislation. Although the staff has considerable leeway for making decisions concerning the everyday administration of programs, the overall goals and policies are set by the laws that established public agencies.

Antipoverty Agencies. Our recent increased awareness of the needs of the poor and of their right to have a voice in our society has led to antipoverty legislation and to new agencies established with money authorized under these laws. Most funds have been granted by the Federal Government to newly formed local groups rather than to established public or voluntary agencies. Often there is a requirement that the state and local governments contribute some financial or other support, but they, too, have often granted money directly to the new agencies rather than setting up duplicate public agencies in the community. These new agencies have not been operated under civil service regulations. Much of their initial flexibility was related to their newness, but in some cases, they have already begun to become rigid and divorced from the clients and those problems they were meant to solve. Sometimes

another criticism has been made about these agencies -- that their lack of strict regulations has led to an unprofessional approach to services.

Voluntary or Private Agencies. Voluntary agencies came into existence as a result of the concern of private citizens about certain social problems or about problems that could not be met by existent public agencies. Many voluntary agencies were created before the public agencies, although their focus was often changed when the government assumed major responsibility for the problems they had been designed to meet.

While they have at least some support from private contributions, most also receive some government funds. Private agencies must meet public standards in programs for which they get public money, but the voluntary agencies are free to choose whom they want to serve and have greater flexibility in hiring staff. This leeway can mean that the private agencies are able to help some persons who would otherwise not be served, but it can also mean that these agencies are able to ignore those they do not wish to serve.

STUDENT LEARNING ACTIVITIES

- Visit a local social service agency, and meet with paraprofessional and professional staff. Observe typical problems dealt with by these agencies.
- Discuss in large group the number and type of agencies serving the local community.
- Write a short summary on the activities observed during field trips.
- Compile a community resource file as a group project. Utilize the information collected during field trips.
- View film *The Captive*, which presents the effects of unemployment on the people of Appalachia.
- View film *Portrait of the Inner City* which examines the streets, schools, and living quarters of the inner city slums.

TEACHER MANAGEMENT ACTIVITIES

- Divide class into three groups and assist each group to report on a particular type of social or economic agency.
- Arrange for students to visit a local social or economic service agency to meet staff as well as to observe workers performing different duties.

- Organize and lead discussion on general operation of social welfare agencies in our society.

- Organize a discussion on the major job families in social and economic services. Discuss in detail the "interrelated" nature of the job families.

RESOURCES

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Unit 2 Early Influences on Social and Economic Services in America

INSTRUCTIONAL OBJECTIVES

1. Ability to identify several beliefs or practices common to England in the 1600's and America in the 1700's which influence our present social welfare system.

2. Ability to discuss the major components of the English poor laws.

3. Ability to identify at least three discernible "eras of thought" concerning social and economic services in America.

CONTENT

English Influences. Many of our beliefs and ways of doing things in the field of social welfare have roots in the distant past, primarily in the British Isles. It is partly because they were developed in times and in societies different from our own that these beliefs and attitudes are difficult to change. The influence of the past can be seen today in the manner in which we help people in trouble. The thinking and practices that led to the English Poor Laws of the early 1600's were brought across the ocean by the first settlers. Despite great differences in our present way of life from that of the early settlers, the same kinds of thinking still exist and can be identified.

As long as people lived off the land (that is, before a money and market economy developed), the kinds of problems they faced were quite different from the ones we face today. Almost everyone, including children and the aged, could be useful on the farm. When help was needed by the poor, charity was provided by the Church. There was no shame attached to receiving such aid, and it was considered a good deed to contribute to charity. To some extent, the lack of shame in

accepting charity was due to the fact that almost everyone was poor, and perhaps only one step ahead of starvation. Epidemics, drought, or famine affected everyone.

As it became clear that more profits could be made by grazing sheep than by farming, landowners began to evict people from the land that they had worked for years. Farm land became pasture and many farmers became wanderers. Towns and industries had not yet grown enough to provide work for many people. What was to happen to the ex-farmers? They didn't care for the idea of working for someone else after they had shared the use of the land for so long. Some searched for work at decent wages; very few found it. Many people hid out in the forests and moors, or became beggars, thieves, or vagabonds.

The English government decided that something had to be done to make people work. This idea that people will not work unless they are forced to do so still affects our thinking and is expressed quite openly much of the time. Between the years 1350 and 1600, laws, regulations, and decrees such as these were used to force people to work:

- Anyone giving money to beggars would be fined;
- Able-bodied men might be whipped, branded with a hot iron, have an ear cut off, or even hanged if they refused to work;
- Children could be forcibly taken from their parents to become apprentices;
- Work might be made available by supplying wool or flax to be woven at home, and if a person refused this work, he could be sent to a "House of Correction."

As time went on, it was recognized that the sick, the aged, and other disabled poor persons needed special consideration. Thus the laws came to reflect both a harsh attitude to force people to work, and a more lenient attitude toward those who were physically unable to work.

<u>English Poor Laws</u>. The famous Poor Laws of 1601 reflected both these attitudes. In giving aid to the disabled, the government was afraid that if living on charity became too pleasant, people might prefer not to work at all, and might even make themselves disabled. Even today there exists much confusion concerning the intent of welfare policies for the able and disabled.

The Poor Laws are important to us because they have guided social and economic practices in England and in the United States for more than 350 years. They contained the following:

Compulsory taxation - Under the Poor Laws, compulsory taxation, instead of voluntary contributions, was used to raise money to help the needy. Another major change was that "charity" was now administered by the government rather than the Church. The government appointed representatives in each parish or county to operate this program; they were known as "Overseers of the Poor."

Able-bodied and disabled people - As noted, the Poor Laws provided for different kinds of treatment for the able-bodied and the disabled. Authorities were given the power to help the blind, the lame, and others unable to work, and to build "convenient houses of habitation" for them; these came to be known as "Almshouses" or "Poorhouses." Work was provided for the able-bodied, and idlers were subject to punishment. Children could be taken from their parents and made to work for someone else as an apprentice or an indentured servant.

Relatives' responsibility - Children, parents, and grandparents were all declared responsible for each other. Before a person could turn to the government for help, he was forced to seek support from those relatives who were required by law to aid him.

Laws of Settlement - The Law of Settlement was added to the Poor Laws about 60 years after they were enacted (about 1660). Local residents would not support newcomers who might have come to their town only to obtain relief. So it was decided that a person had to live in a community a certain length of time before he became eligible for assistance. But since it was difficult to predict who might later become dependent, the newcomer had to prove he could become self-supporting. If he couldn't prove this, he was denied the right to live there. Because of this ruling, groups of people were being escorted all across England for long periods of time looking for a community which would take them in.

American Beginnings. The health and welfare pattern of social services that developed in the American colonies was largely modeled after the English Poor Laws, with some differences due to the special conditions of the frontier. The pattern was a makeshift one since each colony developed its own regulations. In most cases, anyone needing help was considered a "pauper" regardless of the cause of his condition. Paupers included the sick, the handicapped, the aged, widows with young children, orphans, and the mentally ill, as well as the able-bodied poor.

Colonial Period. The principle of local responsibility evolved in America during the Colonial Period. During that time local

or town governments controlled many community affairs. They determined the prices of articles for sale, the kinds of handicrafts that the town needed, and the rules for apprenticeship; they also organized the defense against enemy attack. It was logical that local governments would also be responsible for the care of the poor. However, they were principally concerned with preventing people who might become dependent from taking up residence in the town, thereby becoming eligible for relief. Those who could not prove that they would not become dependent upon the town, were kept out, and both men and women were subject to public whippings if they returned, once warned away. In this way the towns kept down the number of poor under their jurisdiction, and consequently the costs of relief.

When relief was given, it was usually dispensed to those who were living in their own homes rather than in institutions, the so-called "Outdoor Relief." When people were given help in an institution such as a poorhouse, it was "Indoor Relief." Outdoor Relief took several forms:

Boarding out - A well-to-do person in the community was paid by the town to provide room and board to a person in his home.

Auction - Orphans, neglected children, the disabled, the senile, the feebleminded, and the insane were "sold" at public auction to those bidders willing to undertake support at the lowest cost to the community. These bidders, as you might imagine, were not very charitable -- they usually tried to get the most amount of work out of the poor at the lowest possible cost.

Contract - A citizen agreed to take care of a certain number of paupers at a fixed price per head which was paid by the town. The paupers were put to work by the contractor, who was interested only in getting the most amount of labor for the least amount of expenditure.

Apprenticeship - Dependent children were apprenticed or "bound out" until they reached the age of 21. Their guardians were supposed to treat them well and to teach them to read and write, but apprentices frequently complained of abuses, cruelty, and little opportunity for education.

Welfare practices were even harsher after the American Revolution than during the Colonial Period. Communities usually aided the poor in four ways by the 1820's: almshouse relief; home relief; and the "contract" and "auction systems," as described above.

The Rise of Institutional Relief. The first Almshouse (or Poorhouse) was built in Massachusetts in 1662. While it was to become an important part of the American social welfare scene, this institution was rare in Colonial times. About twenty years after the first Almshouse appeared, the inmates were provided with work and the Almshouse became a Workhouse.

The Almshouse was for all categories of dependents -- the able-bodied, the disabled, children, the aged, the mentally ill, the physically handicapped, and the criminal. Because few distinctions were drawn among the inmates, the Almshouse was regarded as mixed or undifferentiated. The idea that there should be Almshouses for the helpless, Workhouses for the able-bodied, and Houses of Correction for the criminals was suggested, but never put into practice during Colonial times.

In 1823, a state legislative committee reported that "the poor when farmed out, or sold, are frequently treated with barbarity and neglect by their keepers." However, this kind of indictment did not stimulate the use of the Almshouse as the major source of public relief until later.

Manufacturing and commerce were growing rapidly in the U.S. during the early nineteenth century. Canals and railroads were being built. Steam-driven machinery was replacing the old handicraft system of making products. The factory system, with its need for cheap and seasonal labor, began to dominate the economy, offering the working people low wages, long hours, and periodic depressions. In earlier times, a person was self-reliant as long as he was able-bodied, since he could subsist on the crops he grew or the proceeds from the sale or barter of handicrafts. But, as a wage earner or employee, he could only take care of himself when there was a job at decent wages.

State Responsibility for Social Welfare. After the Civil War, state governments began to assume a more direct role in welfare matters. This followed from the fact that more money was being provided by the state to local as well as to private agencies. Since the state provided the money, it had a right to know how these funds were being spent. At first, semi-official groups of volunteers represented the states in these matters, but these gave way to state Boards of Charity and state Commissioners of Charities. These boards finally became Boards of Public Welfare.

The rise of state supervision revealed some of the deplorable conditions that existed in public institutions. For example, a law was passed in 1875 in New York as a result of the findings of investigative committees. That law required the removal of healthy children between the ages of three and sixteen

from poorhouses. Later this requirement was extended to include children of all ages. This type of action eventually led to the placement of children with families and the development of special institutions for dependent children.

Specialized institutions were developed to care for the insane, the epileptics, the feebleminded, and others. While the trend was toward greater use of specialized institutions, all the states did not move at the same speed. As one would expect, differences in resources, in population, and in political climate affected the rate at which a state moved toward more humane treatment of its various groups of state dependents. By 1897, 16 states had boards engaged in setting standards, supervising local institutions, managing some institutions themselves, and raising funds.

At the turn of the century, several states began to enact legislation to provide assistance in their own homes to persons considered especially needy or "deserving." Persons in that category were the blind, widowed mothers of dependent children, and by the 1920's, the aged. While these state programs represented a step forward, only a few states began such programs. State funds merely supplemented local fund raising and programs, and initiative for the programs rested with the locality responsible for their administration.

The Reform Era. The Reform Era of the early 1900's marked a change in the thinking and attitudes of many Americans about a number of important social questions. While no problems were really "solved" in that era, some new steps were taken which were unfortunately halted with the outbreak of World War I. By 1900, the U.S. had taken its place as one of the leading industrial nations of the world. The nation of farms was fast becoming a nation of factories, cities, railroads, and corporations, and there were more than a few millionaires. The new millionaires, the masters of the great corporations, or captains of industry as they were called, were replacing the old merchants, the small manufacturers, and the respected leaders of the past -- lawyers, professors, and ministers. But a new coalition, consisting of members of the urban middle class, the trade unions, and discontented farmers, protested against social ills and demanded certain changes. They wanted to put a brake on the monopolies and the huge corporations that were dominating society.

The federal government passed laws regulating monopolies, and instituted suits against them, set up banking controls, and fostered laws for the inspection of food and drugs. Some states limited the hours of work for women and children in certain occupations, fixed utility rates, wrote housing codes, demanded safer and more sanitary conditions in manufacturing,

etc. This government activity meant that the doctrine of laissez-faire had lost some of its former influence. Social reform became the order of the day. And there seemed to be a desire to create an environment dedicated to the service of mankind.

A reappraisal of the causes of poverty was part of the social outlook of the humanitarians, progressives, and reformers. As suggested, the main concern of nineteenth-century charity was the reform of the individual pauper, rather than the eradication of poverty. Poverty had been regarded as good "medicine," and a necessary spur to the less ambitious in society. During the Reform Era, however, people challenged the old ideas of poverty and began to view it as an evil -- a destructive condition that prevented rather than encouraged men to reach their potential. Those living in poverty, it was thought, might at a time of particular hardship or crisis slip down the ladder into pauperism.

The Depression. Following the stock market crash in October 1929, businesses began to fail, unemployment mounted rapidly, and a downward economic spiral was set in motion. In 1932 and 1933, about thirty percent of the labor force was unemployed. White and blue collar workers were searching desperately for nonexistent jobs.

Matters were no better in rural areas. Daily foreclosures of mortgages and auctions on farms finally resulted in mobs of angry armed farmers attending foreclosure proceedings in order to discourage prospective buyers from purchasing their land.

In the 1900's, Poor Law practices and concepts still dominated the social welfare scene in the U.S. There were some exceptions, such as mother's aid, workman's compensation, and in a few states, pensions for the aged and the blind.

Consequently, when the Depression of 1929 hit the country, the U.S. had a public assistance program still grounded in the law and social philosophy of the Poor Laws of 1601.

It would seem that faith in individualism and the economic system would be shattered by such a profound crisis. Despite the need for drastic measures to create jobs, relieve suffering, and start industry moving, very little was done between 1929 and 1933. It was argued that the country had always managed without serious government intervention before. However, the tragedy and anguish occasioned by the onset of the Depression was so calamitous that the situation demanded drastic revisions in the relation of society to the poor and the needy.

Thus the stage was set for the introduction of new and far-reaching changes in the concepts of social service, as will be discussed in Unit 3, following.

STUDENT LEARNING ACTIVITIES

- Define in a sentence or two these terms in relation to social and economic services: relatives' responsibility, apprenticeship, indoor relief, and outdoor relief.
- Discuss in small groups the influences the English had on social and economic services in America during the Colonial period.
- Conduct a survey with workers in social and economic services as to the relationships between the English Poor Laws and current practices in social and economic services.
- Complete a research assignment tracing the "historical periods" of a specific social welfare institution in the community.
- Identify a major problem confronting social welfare reformers in the 1800's and discuss with others in class whether this problem still exists today.

TEACHER MANAGEMENT ACTIVITIES

- Invite a guest speaker to lecture or lead discussion concerning historical influences on our social welfare system.
- Have students discuss the "English Poor Laws" and their ramifications.
- Provide guidance to students while they complete research papers.
- Have students discuss different types of "indoor" and "outdoor" relief and the purposes they served.
- Have students form groups and discuss advantages and disadvantages of state support of social and economic services.

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Unit 3 Contemporary Concepts Dominating the Social and Economic Services

INSTRUCTIONAL OBJECTIVES

1. Ability to explain in own words the general nature of "New Deal" programs.
2. Ability to contrast the difference between social/economic services as a benefit or a right.
3. Ability to explain the difference between social welfare and social insurance.
4. Ability to name the major components of social security.

CONTENT

The New Deal. Franklin D. Roosevelt, who took office in 1933, was less hemmed in by beliefs of individualism and laissez-faire than his predecessor. Trial and error, innovation, and experimentation became F.D.R.'s hallmark. Roosevelt instituted many progressive programs, which became known as the New Deal. These include:

FERA - The Federal Emergency Relief Act of 1933 (F.E.R.A.) channeled money into the states for unemployment relief, and few claimed that the unemployed were themselves responsible for their condition. Up to this point, relief had been dispensed primarily by voluntary agencies, but the gravity of the problem completely exceeded the resources and capabilities of nongovernment agencies. Now relief money had to be spent by public rather than voluntary agencies.

Youth Programs - Special programs were established for unemployed youth. The Civilian Conservation Corps (CCC) provided camps where young people worked on reforestation and other conservation activities for food, board, and $30.00 per month.

The National Youth Association provided part-time jobs for students and others in schools, parks, playgrounds, and libraries.

Work Programs - One dramatic change by the government was the establishment of the Civil Works Administration, which was "to provide work and wages for four million workers, half from the relief rolls, and half from the unemployed not yet on relief." This program was pushed through Congress as an emergency measure because the usual procedures of setting up work projects were too slow. It ended after a short time because it was deemed too radical and too costly. However, the idea of work relief, as opposed to ordinary public works, had taken hold. The Works Projects Administration (WPA), successor to the CWA, lasted from 1935 to 1943. Federal grants to states and localities amounted to approximately nine billion dollars during the lifetime of the WPA. Work was made available to technical, professional, and white collar workers, and to the unskilled. It is estimated that work was provided for more than three and one half million employables on the relief rolls.

The Social Security Act. The New Deal programs were phased out as business activities and employment increased with the onset of World War II. But the Social Security Act, passed in 1935 and amended many times since, has become the cornerstone of the American social welfare system. The Social Security Act was a social invention new to the U.S., because the heart of the Act was "social insurance." There were innovations in public-assistance provisions (chiefly, the introduction of federal grants to the states and localities for categories of dependents), but the social insurance measures represented a new method of financing income maintenance and added a new group of assistance beneficiaries.

Social Insurance. Social insurance is contributory insurance, either of work, money, or both. That is, employers and/or employees pay taxes into a special trust fund administered by the federal government. After a certain number of payments, or time worked, a person is considered insured. Once insured, that person and his dependents are entitled to certain benefits. The insurance programs, prior to the passage of the medical care amendments, were called Old Age, Survivors, and Disability Insurance (OASDI) and Unemployment Insurance (UI). As the name of OASDI suggests, people at a certain age are entitled to benefits, or if the insured should die, his dependents receive the benefits. If the insured should become permanently disabled, he is also entitled to benefits. Under UI, if the insured becomes unemployed, he is entitled to unemployment compensation.

Benefits Versus Rights. An essential difference between social insurance and public assistance is that the social insurance law states the exact conditions of eligibility and the amount and nature of the benefit. This rules out any administrative discretion; that is, government workers or departments cannot exercise judgment as to whether the "claimant" is worthy or unworthy. The recipient is called a "claimant" in social insurance proceedings, not an "applicant," as in public assistance. His benefits are his by right or entitlement. The regulations and benefit tables are published and accessible to the public.

Applicants for public assistance have always had to answer all sorts of questions about their family, property, savings, etc., in order to become eligible for financial help. This proof of financial need is called the "means test." Applicants have resented the means test as petty, humiliating, and intrusion on privacy. In social insurance there is no means test, because benefits are paid regardless of need. There is no extensive personal investigation, merely verification of one's age, disability, employment status, or relationship to the insured.

American traditions made law-makers more receptive to the idea of insurance rather than assistance. First, the insurance, as passed, was the result of or related to employment. Those not in a position to contribute by money or work to the insurance fund would not be covered or insured. Secondly, private insurance was also acceptable, and despite the differences between private and social insurance, the analogy to private insurance helped to gain conservative support for the bill.

Old Age, Survivors, and Disability Insurance (OASDI). It is not always easy to determine whether or not a person or a family is entitled to OASDI benefits. For that reason, it is probably wise for persons who think they have a claim to get advice at the Social Security Office nearest them. Under certain conditions all of the following are entitled to benefits: retired workers, age 62 and over; disabled workers of any age; wives of workers entitled to retirement or disability benefits; unmarried dependents or deceased or disabled workers; widows or divorced wives of deceased workers; dependent widowers, aged 62 or over, of deceased workers; dependent parents, aged 62 or over, of deceased workers; no entitlement necessary for anyone over 72.

Furthermore, a lump-sum death payment may be made to the widow or widower if she (or he) is living with the insured worker at the worker's death.

Unemployment Insurance. The other social insurance established

by the Social Security Act was Unemployment Insurance (UI). We have mentioned above several other methods that society has utilized to combat unemployment: charity, public relief, and public work programs. Unemployment Insurance is a different approach from the other relief measures. A worker, under certain conditions, is insured against the loss of his job. If he loses his job, he is entitled to receive cash payments for a certain number of weeks to tide him over until he finds a new job.

Administration - Under the Federal Social Security Act, state governments are compelled to set up unemployment insurance programs. UI is a state-administered program, in contrast to OASDI, which is administered directly by the Federal Social Security Administration. State employment agencies handle benefit claims of the unemployed, and also try to place these workers in new jobs. Benefits vary from state to state, and maximum and minimum payments are established by state laws. The general aim of the state programs is to provide benefits to the unemployed worker that are equal to 50% of his former weekly wages. Benefits can be received, in most states, for a maximum period of 26 weeks.

Employer Support - Workers, under the UI Program, do not pay taxes to the unemployment insurance funds. The employer contributes the total amount through a payroll tax. There are different ways of computing this tax in the various state programs.

Coverage - Everyone who is employed is not necessarily covered by unemployment insurance. UI does not cover agricultural laborers, domestics, employees of state and local governments, casual workers (not steady), and employees of nonprofit agencies. However, some states have made separate provisions for state workers, a few for domestics, etc. If a person works for a firm that employs four or more workers at least one day a week for 20 weeks a year, he is probably covered. To be eligible for benefits under UI, a covered worker must not have left the job voluntarily (quit), or must not have been fired for misconduct; he must not be unemployed as a result of a strike or labor dispute; and he must not have refused an offer of "suitable employment." Persons seeking unemployment insurance must register for work at a public employment office. Benefits are not granted automatically. The worker must file a claim that must be approved before benefits are paid. There is a waiting period of one or two weeks while the claim is checked.

Social Insurance and Poverty. While the invention of social insurance represented real progress, critics have continually pointed to weaknesses in the programs. The real poor -- those

who have been unable to hold down a steady job -- may not be covered by social insurance. In the social insurance programs the steady, regularly employed workers benefit most. The benefits are wage-related; that is, the benefits received either in retirement or when unemployed are directly related to the work income earned.

The level of benefits, regardless of workers' earnings, is often criticized as being too low. Many people receiving Social Security payments have to apply for public assistance to supplement the small monthly Social Security check.

Once again, the very poor are usually not the beneficiaries. While the check may supply extra income for the more well-to-do retired or disabled worker, it is not enough real income for the poorer worker who needs it for total support. In the case of unemployment insurance, many workers are not covered at all, and the payments are sometimes well below 50% of wages earned.

And if there is serious trouble in the economy -- a recession or depression -- the 26-week period is not long enough.

Another criticism of social insurance is the question of who really foots the bills. Some feel that employers merely shift the burden of their taxes to the consumers by raising their prices.

STUDENT LEARNING ACTIVITIES

- Write a short report comparing the difference between social services and a "client's" rights.
- Define the following: OASDI, WPA, CWA, UI, and FERA.
- Meet with a field representative of the Social Security Administration and discuss the current social and economic work this agency performs.
- Clip from local paper items relating to contemporary concepts of social welfare and share them with the class.
- Discuss in class the different components of social insurance found in the local community.

TEACHER MANAGEMENT ACTIVITIES

- Arrange debate regarding "New Deal" programs. Divide the class into two groups with one group opposing and the other advocating New Deal programs.
- Arrange for a speaker from the Social Security Administration who is knowledgeable about contemporary concepts

in social or economic welfare.

- Organize students into panels which can research and discuss specific concepts of social and economic welfare.

RESOURCES

If I Were You: A Group Project Book, Barbara Smith, Friendship Press, 1966.

The Church and Social Welfare, A. Keith-Lucus, Westminster Press, 1968.

The Analysis of Social Systems, H.C. Bredemeier, and R.M. Stephenson; Holt, Rinehart, Winston, 1962.

A Sociology of Human Systems, J.H. Monane; Appleton, Century, Croft, 1967.

The Economics of Poverty: An American Paradox, B.A. Weisbrod (Editor), Prentice-Hall, 1965.

Toward Social Welfare: An Analysis of Programs and Proposals Attacking Poverty, Insecurity, and Inequality of Opportunity, C. Wilcox, Irwin-Dorsey, 1969.

Unit 4 Governmental Attempts to Change Social Conditions

INSTRUCTIONAL OBJECTIVES

1. Ability to identify and analyze the reasons implicit in governmental attempts to change social conditions.

2. Ability to identify and distinguish between the major pieces of federal legislation affecting social and economic services.

3. Ability to identify and describe several of the major federally supported anti-poverty programs.

4. Ability to discuss the concept of the new federalism and how local government can benefit.

CONTENT

Crises In Urban Living. During the 19th century, numerous critics described the shocking conditions that existed in certain cities. While there has been some improvement -- public sanitation and building codes, for example -- the conditions in the run-down or slum areas of our cities have much in common with those described by the 19th century critics. The creation of the Federal Department of Housing and Urban Development (HUD) reflects increasing governmental concern over the problems of the city slums.

Housing in city slums - Slum housing is often run-down and overcrowded. In today's cities, in contrast to the past, there may be large, low-cost housing projects together with older, deteriorated housing. In addition to overcrowding, which some observers consider less severe than seventy years ago, slum housing may also have such unhealthful conditions as falling plaster, rats, lack of paint, faulty plumbing, unlit halls and stairways, the odor of decay and garbage, and many other building-code violations. In slum housing, fires are a great hazard. There are greater losses of life, more injuries from

fires, and higher incidences of property damage in the slums than in other parts of the city or in the suburbs.

Social problems in city slums - There are more welfare cases, higher rates of crime and illness, more broken families, and more incidences of moving in and out of the slums than there are in higher-income neighborhoods. Some of the moving is the result of urban renewal programs, which have torn down slum housing and often replaced it with middle- or upper-income housing, or nonresidential buildings -- thus reducing the total number of housing units available to poor families. Part of the moving into slum areas is the result of in-migration -- the mass migration from depressed areas of the United States, such as the South or Puerto Rico -- to urban industrial centers, where greater opportunities are thought to exist.

Minority groups in city slums - Today the slums of the inner cities are populated very heavily by minority groups, although it is important to remember that even in urban areas, the majority of the poor are white. Negroes, Puerto Ricans, and Mexican-Americans do, however, inhabit slums in large numbers, especially in relation to their percentage of the total population. In previous generations, the tide of immigration carried Irish, Germans, Jews, Italians, Slavs, and other groups into the same slums. Some remnants of these older ethnic groups are still found in some of the slums. Except for Negroes, who have been in this country longer than most other ethnic groups, many minority group members have a language problem that makes their adjustment more difficult. When minority group members venture out of their neighborhoods for jobs or housing, there is considerable likelihood that they will meet discrimination -- one reason why they are more frequently confined to their neighborhoods than other city dwellers.

Community services in city slums - Although the slum neighborhood needs the best in community and social services, chances are (in the typical area) that services are inadequate. Garbage is often not picked up regularly; streets are infrequently cleaned; policemen are hard to find; schools are often old, overcrowded, and poorly staffed. Thus, efforts are needed not only to help individuals one by one, but to develop better neighborhoods and communities. This in turn means fostering community participation and building strong organizations of neighborhood residents that can take action, exert pressure, and, hopefully, improve conditions.

The New Federalism. The crises in the urban and rural areas, the existence of poverty in the midst of plenty, the lack of opportunity for disadvantaged youth, and continuing inequalities and discriminatory practices against members of minority

groups have led to an upsurge of social protest in recent years. This outcry, as voiced by the Civil Rights Movement, is one of the important reasons for an increased activity by the federal government on behalf of the poor and the disadvantaged. The increased activity of the federal government in combating social problems has been referred to as the "New Federalism."

There are important reasons for increased federal activity. First, the national government is the only branch of government with sufficient resources (taxing power) to finance wide-scale programs.

Furthermore, there is increasing recognition that social problems, including the problems of the cities, are national ones. For example, many large cities are supporting more and more people on welfare. Many of the recipients are newcomers to the cities who have been forced off the land as a result of the mechanization of Southern agriculture; or they are Puerto Ricans unable to find suitable employment on the island. Certainly, it is unfair to saddle the cities to which they migrate with the responsibility for solving social problems and problems of adjustment that newcomers are bound to have.

In addition, the national economy profits from, and depends upon, the residential mobility of the labor force, and should be expected to assume responsibilities for some of the problems and dislocations caused by migration. Increasing federal action does not mean that localities are not involved. An examination of the new programs indicates a complex mixture of participation by all levels of government.

Anti-Poverty Efforts. The phrase, "Economic Opportunity," used to characterize many anti-poverty programs, is the name of the 1964 Act that is the federal government's major and most highly publicized anti-poverty effort. While many kinds of efforts, including preschool education, are relevant to economic opportunity, job training and employment are the most important parts of many of the anti-poverty programs. It is the purpose of most of these programs to make the disadvantaged more employable by supplying them with educational and vocational training for jobs that do exist. But it is not at all clear that the disadvantaged can be trained to fill the jobs that are available -- largely white-collar work requiring more formal education than most poor people can easily or quickly acquire. Employment following graduation from any of these training programs has by no means been automatic. A number of the economic opportunity programs provided for by federal legislation are discussed below. These programs are by no means a substitute for the employment agencies, vocational

counseling services, and other established programs to aid job seekers and prospective workers.

Manpower Training - The Manpower Development and Training Act (MDTA) is administered by the various state employment services to provide classroom and on-the-job training for semi-skilled, skilled, office, and professional jobs. Public agencies and schools do most of the training, but private industry, unions, and other groups can also do it. Most MDTA programs include basic education as well as training on how to get a job and keep it. The classroom program is usually set up as a "multi-occupational" project where unemployed or underemployed people receive training in a wide range of jobs and levels of skill.

After such broad training, a trainee then chooses which specific job he wants to train for. Some of the more popular courses have been welding, nursing, stenography, and office work. The on-the-job training programs usually do not supply basic education, but instead teach people how to do a job by actually having them work at it, starting with basic aspects of the job and then moving step-by-step toward doing the whole job. A few programs have combined classroom and on-the-job training elements.

MDTA is designed to give priority to unemployed family heads, although one-fourth of the openings are typically available to youths between the ages of 17 and 22 who have never worked before. Unemployed adults receive up to $10 more than their unemployment insurance would be. The young people in the program are paid less. An MDTA training period may last up to 72 weeks, but most run between 20 and 24 weeks.

Job Corps - The Job Corps was created under Title I of the Economic Opportunity Act. The Job Corps has been a highly publicized anti-poverty program open to unemployed youth between the ages of 15 and 22 who have dropped out of schools, who have graduated but cannot find or hold a job, who don't have skills that are in demand, or who cannot pass education tests for army entrance.

Training is done by large private industries, colleges, states, nonprofit private groups, and federal conservation centers. Both basic education and skill training are offered.

The Job Corps, although it teaches urban employment skills as well as conservation skills, resembles the Civilian Conservation Corps of the 1930's in its offer of residential training. Trainees receive food, board, medical care, and a small living allowance; and, when they leave, $50 for each month they were in training. Training is full-time since a person is always near his teachers and fellow students, and he is away from

the noise, overcrowding, and perhaps, family troubles at home. However, many youths get lonely and/or find it difficult to reenter their usual family and social life after they leave the Corps. Whether youth are really prepared for jobs that are, and will continue to be, in demand has been continually asked about the Job Corps program.

The Job Corps has been highly criticized. Accordingly, it has undergone a series of governmental cutbacks in funds during the past few years.

Neighborhood Youth Corps - This program has two parts. It gives students jobs so they can stay in school and it provides work experience to young people who are out of school. Like the Job Corps, it is a part of Title I of the Economic Opportunity Act. Youths between 15 and 22 are eligible. They may work for state or local governments, private nonprofit agencies, including unions, and community action agencies. The work they do must in some way be a service to the public, preferably in jobs that will help poor people.

The Corps is administered by the Manpower Administration of the U.S. Department of Labor, and has four general types of projects: those in which students may work up to 15 hours a week while going to school full-time; those in which unemployed young people not in school may work up to 32 hours a week for up to two years; those in which unemployed youths going to school part-time may work up to 32 hours a week; and summer projects for students who may work up to 32 hours a week for six to eight weeks. All youths receive at least $1.25 an hour. Most projects include basic education, job training, and counseling.

Economic Opportunity Loans - The EOL program was created by Title V of the Economic Opportunity Act. It is operated by the Small Business Administration, and provides for lending money to low-income people so they can expand or start a small business in a poverty area. In addition to the loans, people may receive training and technical assistance. These loans can only be for profit-making businesses; cooperatives and nonprofit organizations are not eligible.

Work Experience - The aim of this program is to give unemployed and low-income adults work experiences so that they will earn money and improve their chances of getting a regular job. Any adult on public assistance and parents of dependent children who are poor but don't qualify for AFDC can get this training. State public welfare agencies operate the work experience programs or designate nonprofit private organizations to operate them.

Little formal training is given; it is felt that many people

need to learn good work habits before they get regular jobs, and so the program provides one or two years of paid work in public services. Projects usually provide personal counseling, special medical care, and other social services, such as day care for the children. A few projects offer basic education, skill training, and job placement.

Operation Mainstream - This is primarily a work experience program in small towns and rural areas for long-term unemployed persons whose income is below the poverty level. Although anyone over 22 years of age can enroll, most people are over 45. Mainstream programs can be run by community action agencies, private nonprofit agencies, and state and local public agencies.

Most Mainstream projects have dealt with conservation and beautification: improving parks and playgrounds, planting flowers and trees, and making small repairs to community buildings.

This program has also sponsored the Foster Grandparents Program in which older people help in day care centers, Head Start programs, and schools.

New Careers - This is a program which grew from experiments in the mid 1960's for the use of aides to assist professionals in the delivery of special social and/or economic services. Because the aides are usually from the same neighborhood and groups as the clients, the aide is able to offer help in a friendly, relaxed manner that can bridge the gap between the professionals and persons on the receiving end of services.

Head Start - Head Start provides special educational instruction for children before they enter kindergarten. The theory behind the program is that disadvantaged children will be more ready for regular school if they have a prekindergarten program that compensates for their so-called "Cultural Disadvantages." Disadvantaged youngsters are to be exposed to the same cultural stimulation as middle-class youngsters. It has long been recognized that most preschoolers, advantaged or disadvantaged, profit from nursery school.

There are three types of Head Start programs: short summer programs for children going into the first grade; follow-through programs during the school year for children who were in a summer Head Start program; and full year programs for children not yet in school. Medical and social services are provided to children and their families. Parents are expected to take an active role in running the programs, and there is also provision for the training of local people to work in the programs.

Vista - The Volunteers In Service to America (VISTA) program was created under Title VIII of the Economic Opportunity Act, and is administered by the recently created Action Agency. Volunteers live and work directly with low-income people, and assist in anti-poverty projects. Most VISTA volunteers are college students or recent graduates. But some volunteers are highly-skilled teachers, lawyers, and community organizers. VISTA volunteers are paid a small sum by the federal government, and serve the communities free of charge.

Model Cities. "Improving the quality of urban life is the most critical domestic problem facing the United States." With this declaration, Congress launched the Demonstration Cities and Metropolitan Development Act of 1966. Model Cities, as this program is known, is the federal government's recognition of the fact that cities of all sizes lack the ability, especially the money, to deal effectively with the critical problems facing them. It also recognized the need for "balanced comprehensive attacks" on the inadequacies of education, employment, health, safety, and physical condition of many of our cities.

The goals and priorities of the Model Cities Act, as set out by Congress, were:

> to plan, develop, and carry out locally prepared and scheduled comprehensive city demonstration programs containing new and imaginative proposals to rebuild or revitalize large slum and blighted areas...and to accomplish these objectives through the most effective and economical concentration and coordination of federal, state and local public effort....

Conditions are growing worse in many urban slum neighborhoods throughout the country, while the nation as a whole is prospering. A few statistics from one of the major cities help to show how great the problem is: of the 8,100,000 people living in New York City, more than 1,700,000 live in the major slum area. Nearly 1,000,000 other New York residents live in changing neighborhoods which are threatened with deterioration of housing, schools and community facilities. Nearly half the city's families have incomes under $6,000 per year, and fully half of these are living below the poverty line.

Federal grants are available to pay up to 80% of the cost of planning and developing comprehensive city demonstration programs. Projects or activities may be funded totally under existing federal programs, or existing programs can be supplemented by special grants of up to 80% of the total nonfederal contribution required. These supplemental grants are not earmarked for any one specific project or activity, but can be

used by the city to assist any activity included as part of the demonstration program -- even those not supported by a federal program.

The Model Cities Law determines the eligibility of neighborhoods, and it limits the total impact in any one city to approximately 10% of the population. The city chooses from among its eligible areas and then selects the programs that are to be funded. A Model Cities Program should include a broad range of projects and activities designed to renew selected neighborhoods, both socially and physically. Plans should include activities to rebuild, revitalize, or expand housing, job, and income opportunities; reduce dependence on welfare; improve educational facilities and programs; combat disease and ill health; reduce crime and delinquency; enhance recreational and cultural opportunities; establish better access between homes and jobs; and generally improve living conditions for the people in the selected neighborhoods.

Medicare and Medicaid. The Medicare and Medicaid Amendments to the Social Security Act, passed in 1965, represented a basic change in the nations' social and economic policies.

Medicare is a type of social insurance combined with health insurance. There are two parts to the Medicare program: hospitalization insurance to help cover the cost of hospitalization and related care, and medical insurance to help with doctor bills and other health expenses. Most people over 65 are covered by Medicare.

Medicare offers three kinds of benefits or assistance in paying bills: those paid to patients while they are in the hospital; those for care in an institution after hospitalization, such as part-time nursing care, physical therapy, etc.; and outpatient hospital diagnostic benefits, such as X-rays, blood tests, etc.

The benefits under Medicare are not free. The patients, since this is a contributory insurance, have to pay part of the hospitalization costs, part of the extended care benefit, etc.

Medicaid, in contrast to Medicare, is not a social insurance program, but is more like a public assistance program. The federal government grants funds to states to set up a program of medical assistance for the needy.

Medicaid invokes the concept of medical indigence. Recognition is given to the fact that people may be able to handle their ordinary everyday expenses, but not be able to pay for medical care. For example, a family of four may be getting along on $100 a week -- paying for their rent, food, clothing,

and other necessities. But they would be completely unable to handle an operation or even dental bills. With Medicaid it is possible for a state to develop a plan that provides free medical care for families whose incomes are below the poverty line.

The passage of Medicare and Medicaid can be viewed as a real breakthrough - an extension of governmental concern into a new area of human welfare. It appears that federal involvement in this area will continue to increase during the next decade.

STUDENT LEARNING ACTIVITIES

- Plan a speaker's program to permit resource people from VISTA, the Model Cities Program, MDTA, or New Careers to visit the classroom.
- Meet with officers of local anti-poverty agencies in their offices to discuss their organization's role in the community.
- Using a hypothetical government program as a model, develop a report on how you would determine guidelines to evaluate its effect on local conditions.
- Participate for one or two days in the work of a local anti-poverty program which is federally funded.
- Prepare a five minute speech about a specific federal program being implemented in the community.
- View films, *A People's Thing* or *Unseen Suburbia*.

TEACHER MANAGEMENT ACTIVITIES

- Collect and make available to students information on federal programs to achieve social change.
- Assist students to plan a balanced speaker's program by identifying appropriate resource people who might be available.
- Arrange for brief field experience for students with a local anti-poverty agency or program.
- Assign class a social action project which will enable students to see the results of social and/or economic work in a community.

RESOURCES

Outskirts of Hope, Westinghouse Learning Corporation, (Audio-Cassette, 8 pieces, purchase, $44.00), 1970.

A Peoples' Thing, NBC Educational Enterprises, (Film, 27 minutes, color, purchase, $330 00), 1970.

In Rural Poverty, The National Mission, United Presbyterian Church, 1970.

What's the Answer to Slums, Institutional Cinema, (Film, 15 min., color, rental, $6.00), 1969.

Sound of Poverty, United Methodist Board Mission, (Audio Tape Reel, purchase, $ 75), 1970.

Unseen Suburbia, NBC Educational Enterprises, (Film, 17 minutes, color, purchase, $240.00), 1970.

Unit 5 Functions and Duties of Workers

INSTRUCTIONAL OBJECTIVES

1. Ability to discuss the general nature of the duties performed by workers in the field of social and economic services.

2. Ability to compare and contrast the general duties of workers in the various aspects of social and economic services.

3. Ability to describe the duties of workers in public, antipoverty, and private agencies.

CONTENT

Role of Workers in Social and Economic Services. Development of a more complex urban society has greatly increased the need for organized social and economic services. Workers in the social and economic services provide the link between public service organizations, and individuals and families who are not able to provide for themselves or who need assistance in solving their problems.

There are several types of organizations, the approaches of which are reflected in three basic methods of social and economic practice: casework, group work, and community organization. Obviously, a worker may use all three methods, but frequently a job title reflects only the primary method used.

Duties. Professional and pre-professional caseworkers attempt to identify the social and economic needs of individuals and families through interviews. They aid them in understanding their problems and in securing such necessary services as financial assistance, foster care, and homemaker service.

Group workers help people through group activities to understand themselves and others better, and to work with others to achieve a common goal. They plan and conduct activities for children, adolescents, and older persons in a variety of settings, including settlement houses, hospitals, homes for the aged, and correctional institutions.

Community organization workers help plan and develop health, housing, welfare, and recreation services for neighborhoods or large areas. They often coordinate existing social services and organize fund raising for community social welfare activities.

The majority of workers in social and economic services provide assistance, as indicated, directly to individuals, families, or groups. However, substantial numbers perform executive, administrative, or supervisory duties, or act as teachers in educational institutions, research workers, or consultants. The wide range of services provided is suggested by the descriptions of the principal areas of concern:

Family Service - Workers in family service positions in State and local governments and voluntary agencies provide counseling and social services that strengthen family life and help clients to improve their social functioning. They also advise their clients on the constructive use of financial assistance and other social services.

Child Welfare - Workers in child welfare positions in government and voluntary agencies attempt to improve the physical and emotional well-being of deprived and troubled children and youth. Their services include advice to parents on child care and child rearing, counseling children and youth with social adjustment difficulties, arrangement of homemaker services during a mother's illness, institution of legal action for the protection of neglected or mistreated children, services to unmarried parents, and counseling of couples who wish to adopt children. They may place children in suitable adoptive or foster homes or in specialized institutions.

Education - Workers employed by schools aid children whose unsatisfactory behavior or progress in schools is related to their social problems. These workers consult and work with parents, teachers, counselors, and other school personnel in identifying and seeking solutions to the problems that hinder satisfactory adjustment.

Health - Workers employed by hospitals, clinics, health agencies, rehabilitation centers, and public welfare agencies aid patients and their families in the solution of social problems

accompanying illness, recovery, and rehabilitation. They usually function as part of medical teams which also include physicians, therapists, and nurses.

Some workers provide services to patients in public mental health hospitals, centers or clinics. They develop and report information on the patient's family and social background for use in diagnosis and treatment. They help patients respond to treatment and guide them in their social adjustment to their homes, jobs, and communities. They have particular responsibility for helping the families of patients to understand the nature of the illness. Such workers also participate in community mental health programs concerned with the prevention of mental illness and readjustment of mental patients to normal home and community living.

Salaries. The salaries of social and economic service workers vary with the type of agency, geographic location, and level of employment. The average salary at entry level for a preprofessional is $4,000 per year, while the mid-career average is $5,300 per year. The average beginning level salary for a professional is $7,300 per year; the top average is $11,800 per year.

STUDENT LEARNING ACTIVITIES

- Develop a short comparative report on the duties of workers in social and economic services, and compare them with own interests and abilities.
- Select one or more of the areas of social and economic services, and determine the local entry level jobs available.
- Develop a list of experiences and/or types of training that would enable a person to make rapid progress on a job in social and economic services.
- Listen to audio-tape *Interview With a Social Worker*.
- Discuss with friends, relatives, etc., the experiences they have had with preprofessionals and/or professionals in the field of social and economic services.
- Visit a local civil service office and study the types of jobs available in social and economic services, with entry salary and duties.
- Discuss with students with similar interests the duties of workers in a specific job family in social and economic services.

TEACHER MANAGEMENT ACTIVITIES

- Divide class into three or four groups and assist each group to prepare a presentation detailing the duties of specific workers in social and economic services.
- Arrange for field trip to visit a local social welfare agency.
- Arrange a display concerning the mission of local social welfare agencies.
- Organize a discussion on the major tasks of social and economic service workers. Define and discuss the three main categories of duties in detail to include: case work, group work, and individual work.

RESOURCES

Social Service and the Social Worker, Eye Gate House, (Filmstrip, purchase, $5.25), 1970.

Interview With a Social Worker, Imperial International Learning, (Audio Reel Tape, purchase, $5.50), 1969.

The Interior Life of the Social Worker, Catholic University of America, 1956.

So You Want To Be A Social Worker, Periman, H.H., Harper and Row, 1962.

Nonprofessionals In the Human Services, Grosser, C., et.al., Jossey-Bass, Inc., 1969.

Social Worker, Universal Education Visual Arts, (Film,color, 17 minutes, purchase, $209.00), 1967.

Unit 6 Profile and Recommended Qualifications of Workers

INSTRUCTIONAL OBJECTIVES

1. Ability to discuss the recommended qualifications of a worker in the social and economic services, including age, education, and background.

2. Ability to evaluate his own qualifications and compare them with the recommended qualifications required for entry level jobs.

CONTENT

Restructuring of Social and Economic Services. During the past three years, there has been a gradual restructuring of requirements for entry level jobs in the social and economic services. Until recently a bachelor's degree, preferably in social welfare, was the minimum educational requirement for beginning jobs in this field. This is still generally true, but more and more of the job duties which were assigned to professionals are now being given to preprofessionals. Such job restructuring is resulting in more jobs for high school graduates in social welfare.

Education. As stated, possession of a bachelor's degree is generally required for employment at the professional level; in addition, the academic training must frequently be in specific areas of instruction.

Social and economic workers at the professional level may encounter a wide range of training and experience requirements. Some agencies accept completion of a two-year graduate curriculum in a recognized school of social work, including supervised field work; others accept a year of graduate study in social work plus a year of paid experience in a specific phase of social work; and others will accept a year of graduate study with no experience, provided that the academic field work assignment is in an appropriate specialized setting. In general,

the possession of a master's degree in social work is the minimum requirement for attaining professional status in case work and social group work.

Many community organizations related to antipoverty programs require a minimum of the bachelor's degree, plus successful experience in working with minority groups, the disadvantaged, and the hard-core unemployed. Occasional opportunities exist in "out-reach" programs for persons with as little as two years of college who possess practical experience in disadvantaged target areas.

Due to the rapid expansion of the social and economic services, coupled with a shortage of professional level expertise, the use of aides at a preprofessional level is becoming increasingly common. Because focus is on the needs of specific groups or geographic areas, the formal educational attainment is becoming less important than a person's attitudes, values, and willingness to work. In general, younger aides are high school graduates. Older people employed as aides who are not high school graduates are frequently enrolled in G.E.D. programs.

Personal Qualifications and Aptitudes. An individual interested in social and economic services work should have a healthy interest in people of different ages and backgrounds. He should show a capacity for positive relationships, self-discipline, and eagerness to learn and to apply knowledge to practical situations.

The following abilities are of key importance: an awareness of, and consideration for, the feelings of others; willingness to form and sustain working relationships; willingness to accept other points of view without rancor; capability in handling unexpected or unpleasant situations; and the ability to plan a realistic program of work, to follow through on assignments, and to accept the discipline of study and work.

Few individuals have all these abilities, but if a person has most of them, there is a likelihood he will enjoy, and be successful in, the social and economic services.

STUDENT LEARNING ACTIVITIES

- Study and discuss material on education, aptitudes, and values required of a worker in the social and economic services.
- Interview at least two preprofessionals and prepare a "profile" describing their age, education, background, etc.

- Analyze own qualifications and compare with the recommended requirements for a preprofessional in the social and economic services.

TEACHER MANAGEMENT ACTIVITIES

- Gather materials for student use concerning age, education, and qualifications for social and economic services workers from local social welfare agencies, Department of Employment, or State Employment Service.
- Arrange for students to individually interview one or two preprofessionals and report their findings back to the class.
- Provide opportunity for small group analysis and comparison of student's own qualification for employment as a social and economic services worker.

RESOURCES

Social Welfare As a Career, National Welfare Assembly, Inc., 1966.

Employment Outlook for Social Service Workers, U.S. Department of Labor, Bureau of Labor Statistics, U.S. Government Printing Office, 1968.

New Careers for the Subprofessional, U.S. Government Printing Office, 1970.

Unit 7 Career Lattices and Employment Prospects

INSTRUCTIONAL OBJECTIVES

1. Ability to identify at least five preprofessional entry level jobs in social and economic services.

2. Ability to construct a typical career lattice for at least one of the job families in social and economic services.

3. Ability to identify at least three sources of information and statistics concerning the employment outlook for the field of social and economic services.

CONTENT

Typical Career Lattices. There are three clearly identifiable career lattices in social and economic services. The lattices shown in Figures 3, 4, and 5 are based on large social welfare or employment organizations. Accordingly, the number of positions might be reduced in smaller organizations. While the career lattices emphasize preprofessional jobs, they also include professional positions.

These career lattices illustrate possible opportunity in the areas of the employment or social services. The positions illustrated implicitly include tasks which deal with assistance, counseling, and social rehabilitation.

Employment Outlook. It is estimated that approximately 1.2 million people are employed in the field of social and economic services. A recent survey shows this field to be growing at a rate of 6% per year.

At present, there is a shortage of well-qualified workers in the social, economic, and employment services, which is expected to continue through the next decade. This is due, in

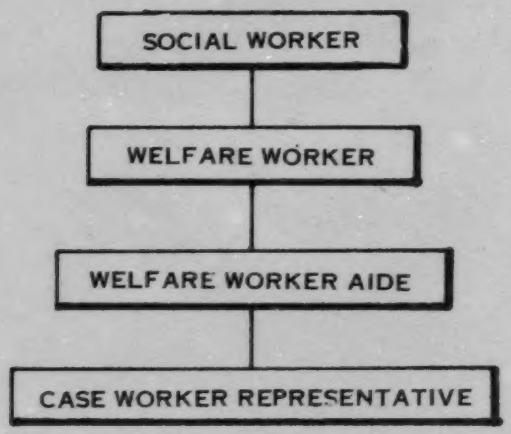

Figure 3 - Typical Career Lattice - Social Welfare Workers

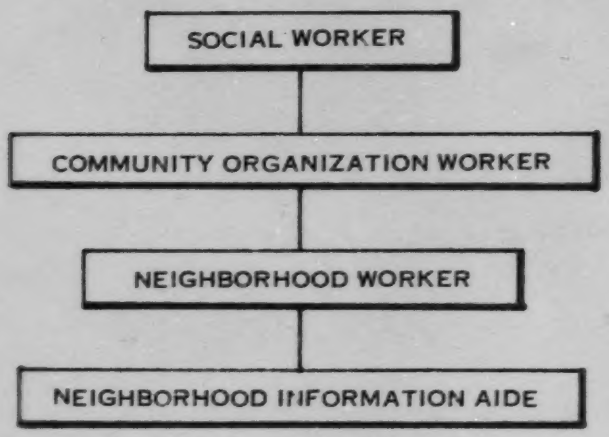

Figure 4 - Typical Career Lattice - Community Organizations

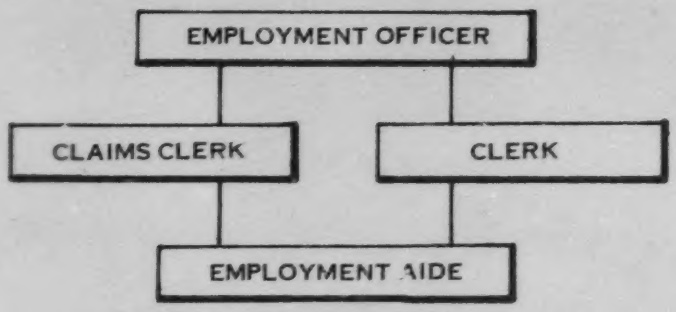

Figure 5 - Typical Career Lattice - Employment Service Workers

part, to the population increase, and in part to the multiplication of problems facing each individual because of increasingly rapid and complex industrial developments, and the mounting pressures of urban crowding.

Industrial changes often hit the labor market with sudden impact, obsoleting certain occupations within only a few years. Many of the newer occupations require a higher degree of skill than is characteristic of traditional occupations. Many individuals in the labor market today may have to retrain themselves several times during their working lives to meet changing occupational requirements. Such widespread changes in the content of jobs make the role of the social service and employment workers essential, since many individuals cannot make occupational adjustments without some kind of assistance.

In response to the accelerated trend of job obsolescence and to the increasingly complex job-entry requirements, government programs (Manpower Development and Training, Youth Job Corps, Youth Opportunity Centers, Economic Opportunity Centers, and Multi-Service Centers) are emphasizing the useful role the social and economic workers can play in helping people.

Sources of Employment Information and Statistics. Several excellent sources offer up-to-date information about work opportunities in the fields of social and economic services. The texts *Careers in Social Work* and the *Occupational Outlook Handbook* are two excellent sources.

The following organizations also have material concerning employment in these fields:

American Personnel and Guidance Association
1605 New Hampshire Avenue, N.W.
Washington, D.C. 20009

American Psychological Association, Inc.
Division of Counseling Psychology
304 East 45th Street
New York, New York 10017

U.S. Department of Health, Education, and Welfare
Office of Education, Guidance, and Counseling
Programs Branch, Washington, D.C. 20202

National Commission for Social Work Careers
2 Park Avenue
New York, New York 10016

STUDENT LEARNING ACTIVITIES

- Discuss career possibilities and requirements for employment in the field of social and economic services.
- Use the *Dictionary of Occupational Titles* and describe at least one entry level job in social and employment services.
- Discuss with a social service worker the type of job with which he started and the better positions to which he might aspire.
- Construct a typical career lattice for a job family in a local social or economic service agency.
- Write a short summary of employment projections in the social and economic services.

TEACHER MANAGEMENT ACTIVITIES

- Prepare, with student assistance, a file of statistics concerning the employment prospects for jobs in the social and economic services.
- Arrange for small group discussion on employment goals and a comparison of these goals with the employment outlook in educational services.
- Arrange for students to visit a local social welfare agency or employment office for them to meet with preprofessional and professional staff.

RESOURCES

Encyclopedia of Social Work, National Association for Social Work Careers, 1965.

Careers in Social Work, National Association for Social Work Careers, 1967.

Counselors, Supply, Demand, Need, American Personnel and Guidance Association, 1970.

New Career Opportunities, Popular Science, (Filmstrip, color, purchase, $6.00), 1968.

New Careers for the Subprofessional, U.S. Government Printing Office, 1970.

Section 3

EDUCATIONAL SERVICES

Here are the contents of Section 3 of the Orientation Curriculum Guide. We suggest you read it before you read the text.

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Section 3

EDUCATIONAL SERVICES

Unit 1 Nature of the Field

INSTRUCTIONAL OBJECTIVES

1. Ability to identify two major changes occurring in the field of educational services and to be able to discuss their implications.

2. Ability to identify the major job families in educational services as well as to describe the nature of the work for each.

CONTENT

A Field in Transition. Educational services is one of the major fields in public service. It is estimated that over four million people are employed at a professional or preprofessional level in this field, with additional thousands of workers employed on a part-time basis.

The entry of preprofessional personnel into this field is a new phenomenon, with wide-spread support from professional organizations and civil service agencies. This dramatic change in personnel interrelationships is expected to result in substantial differences in the staffing pattern in schools and libraries. Preprofessional personnel help to relieve the teacher, the librarian, and the museum curator from administrative, clerical, and noninstructional tasks, and provide them with more time to devote to their professions. In addition to this, however, the preprofessional personnel offer new talents, fresh views, and supplementary services which aid in meeting the educational needs of individuals.

Major Job Families. Educational services incorporate the major job families of education and libraries; in addition, museums make up an important but smaller category, with requirements, opportunities, and salaries largely overlapping those of education and libraries. For this reason, this section will

concentrate largely on the two major categories.

Teaching is the largest of the professions. About 2.6 million men and women were full-time teachers in the nation's elementary schools, secondary schools, and colleges and universities in the 1970-71 school year. In addition, thousands taught part-time; among them were many scientists, physicians, accountants, members of other professions, and graduate students. Similarly, large numbers of craftsmen instructed part time in vocational schools. Many other people taught in adult education and recreation programs.

In 1970, about 125,000 persons were employed as professional librarians. Librarians are generally classified by the type of library in which they are employed: public library, school media center, college and university library, or special library. School librarians accounted for more than 2/5 of all librarians; public librarians represented nearly 1/4; librarians in college and universities accounted for 1/5; and those employed in special libraries (including libraries in government agencies), 1/7. Some librarians were employed in correctional institutions, hospitals, and state institutions. A small number of librarians were employed as teachers and administrators in schools of library science. Most librarians work in cities and towns. Those attached to bookmobile units serve widely scattered population groups, mostly in suburban or rural areas.

Generally speaking, these three job families are concerned with the development of individual competencies and intellects, and relate to the performance of duties in support of teachers, educational administrators, librarians, and museum curators. People working in educational services are expected to be competent in a broad range of duties related to the specific job family (as more explicitly discussed in Unit 2 of this section).

STUDENT LEARNING ACTIVITIES

- Construct a chart showing the rate of employment in the educational services between 1960 and 1970.
- Define the following terms: job family, educational services, and job.
- Describe the field of educational services, pointing out the reason it is in a state of transition.

TEACHER MANAGEMENT ACTIVITIES

- Have students in small groups discuss the three job families.

- Subscribe to publications distributed by the State Employment Service concerning the educational services occupations.

- Provide guidance and instructional materials for construction of a chart or graph to show the employment rate between 1960 and 1970 for the educational services.

- Prepare and make available to students a file of data on employment information in the educational services.

RESOURCES

Dictionary of Occupational Titles, U.S. Department of Labor, U.S. Government Printing Office, 1965.

Occupational Outlook Handbook, Bureau of Labor Statistics, U.S. Department of Labor, 1970-71.

Meeting Critical Shortages of Classroom Personnel, U.S. Department of Health, Education, and Welfare; U.S. Government Printing Office, 1970.

Careers in Education, National Center for Information on Careers in Education, 1971.

The Real World of the Beginning Teacher, National Education Association, 1966.

Teacher, Simon and Shuster, 1969.

So You Want to Be a Teacher, Harper & Row, 1964.

This Is Teaching, Scott Foresman, 1968.

To Be a Teacher: An Introduction to Education, Prentice-Hall, 1969.

Teachers: Professionals in Public Service, Interstate Print Publisher, 1969.

The Teacher and School Organizations, Prentice-Hall, 1966.

Teachers in Our Big City Schools, B'nai B'rith, 1969.

Teachers and Teaching, Penguin Books, 1969.

Auxiliary School Personnel, National Education Association, 1967.

Teachers Aides: A New Opportunity, U.S. National A-V Center, (Film, black and white, 21 min., purchase), 1969.

An Effective Teacher-Aide Program, George A. Pflaum, 1970.

Some Day I'll Be a Librarian, Hawthorn Books, 1969.

Librarian, ARCO Publishing, 1967.

Introduction to the Library, Eye Gate House, (Filmstrip, color), 1970.

Library Story, Encyclopedia Britannica, (Film, color, 15 min., purchase), 1969.

Introduction to Librarianship, McGraw-Hill, 1968.

Behind These Doors: Science Museum Makers, Rand McNally, 1968.

Unit 2 Basic Introduction to Educational Services

INSTRUCTIONAL OBJECTIVES

1. Ability to demonstrate knowledge of educational organizations and their roles at the different levels by being able to identify at least four general objectives of education.

2. Ability to explain the components and the structure of public education in the United States.

3. Ability to discuss several of the major issues confronting the unmet needs in education to include knowledge of the financing of public education and the roles of the Superintendent and the Principal.

4. Ability to identify the various types of libraries, explain their functions, and typical organization.

CONTENT

Overall General Objectives of Educational Services In a Democratic Society. Educational services primarily aim to ensure the opportunity for all the people to have the skills and knowledge necessary to keep our democratic system of government working. A second major objective of educational services is to provide a person with an opportunity for continuing growth and development in the acquisition of new skills and knowledge. Lastly, educational services aim to provide the opportunity to help each person achieve his fullest potential.

Educational Organizations. Since 1918 every American state has followed a compulsory school attendance law. The communities are obliged to provide safe schools for the education of the children. The operation of special classes for partially blind, deaf, retarded, and subnormal children have been warranted in most areas.

The educational organizations are made up of elementary schools, junior high schools, senior high schools, junior colleges, colleges, universities, and vocational training schools. The public accepts the ever-expanding roles of our schools in meeting society's needs. Although we have no national school system, the structures and curricula of the various state educational systems are remarkably similar, with the result that we have now an orderly plan of state public school systems that provide education for all.

Role At Local, State and National Levels. The role of educational services at the local level is to provide the students with a record of basic information about their work as preprofessionals, their community, and continued education. The introduction of aides into schools is part of an effort to improve the schools in one's community. Each student will understand how the operation of the school system relates to broader issues affecting him and his community.

At the state level, educational services give the student the opportunity to become a better citizen. By obtaining more education the student will understand the responsibilities and goals of the society he lives in and this will enable him to respect the laws of the land and work to make his community and state better. Educational services enable the student to understand the structure of the American school system and his place in it. Educational services give each student more education, which in turn provides the tools a person needs to control his life and his relationships with people. An educated person is not likely to become a "loser" in life; he can find better jobs and manage his home life and finances, with the resources to enjoy his leisure time.

Changing Role of Education. As our society and culture change, the role of education must change. Schools are expected to achieve a wide range of goals in preparing citizens to conserve that which is good in our democratic society, and improve that which is not. Two new types of schools came into being during the 20th Century - the Junior High School and the Junior College. The idea of the Junior High School began with the effort to improve the elementary school curriculum. The elementary programs needed to be shortened and enriched, and hence high school courses began in seventh grade. The Junior College bridges the gap between high school and college, or provides advanced vocational training.

By the 20th Century, the American frontier had almost disappeared; simultaneously, the United States was developing into the greatest industrial nation in the world. These changes in our national economy assigned a new and enlarged responsibility

to our educational system. Elementary, secondary, and tertiary schools evolved.

As the industrial revolution created the need for better provision of specialized training in the handling of machines, vocational training programs spread. The Smith-Hughes Act of 1917 provided for federal funds to assist the states in setting up courses in agriculture, home economics, and industrial arts. Vocational high schools soon sprang up everywhere in big cities and on a regional basis in many counties, and the G.I. Bill of Rights encouraged the extension of this training into the adult years.

Organization of Public Education In the American School System. Public education has always been considered primarily a state function, although it has been greatly assisted by the federal government.

The Federal Government's Role. The Federal Educational Agency, authorized in 1867, and now called the Office of Education, was formed with specific responsibility for education. The fundamental purposes of this office are: to collect and analyze statistics and facts; to administer grants; to advise on school organization, administration, and methods of teaching; to improve the teaching profession; and to promote international relations in education.

The U.S. Office of Education has principally encouraged public education through federal grants and grant of land; many programs in school districts are paid for by federal funds. In addition to grants, there has been a growing list of federal activities in education, such as the Smith-Hughes Act of 1917, which provides federal aid for vocational work in the public schools; the Vocational Rehabilitation Manpower Development and Training Act of 1962, and so on.

The State's Role in Education. The state's educational organizations are usually composed of a State Board or Council of Education which is a policy-making body; a Superintendent of Education, who furnishes leadership for his state's education; and a State Department of Education or Public Instruction, which consists of competent staff who provide service and leadership in education.

The County or other Local Agency as Policy Makers. The next subordinate governmental unit in the United States is the county. It usually includes a County Board, which is a unit for the support and control of education. The powers and duties of a County Board may include: the election of a County Superintendent of Schools; the determination of educational policies for the county; the prescription of rules and

regulations for the conduct and management of schools; and the control and supervision of public school systems through the County Superintendent and his professional assistants.

In a few states the township is the local policy-making body for school administration (as in Pennsylvania, Indiana, and New Jersey). The township is essentially a rural unit of government, and has the same powers and duties as a County Board. In some states the town is the educational unit (mainly in New England), with the same powers and duties as other school districts.

The local school district is a unit for educational administration. It was often created around elementary schools. Separate high school districts were organized (as in California, Arizona, Michigan, etc.). The local school districts generally include a Board of Trustees or School Directors, with powers to operate the schools. Often a city is set up as a separate city school district because of the concentration of wealth and the complexity of the organization required in cities. Large numbers of personnel are found in the bigger districts under the professional direction of a Superintendent of Schools. A lay board of education, which chooses all personnel, determines policies, and provides directive powers, directs the entire system.

Other type of districts may include certain municipal units in the school district, such as in California. In New England and New York, a Supervisory unit may be found, acting as sort of an intermediate unit between the state and the local district; it is usually formed from two or more local units or school districts. Merged or consolidated districts are merely the result of the merging or grouping of small districts into larger and more efficient ones (as in Pennsylvania).

Vertical Structure of Public Education. The main divisions of public education system are Pre-elementary, Elementary, Secondary, and Higher Education.

Pre-elementary education, including the nursery school (ages from 18 months to 4 years) and the kindergarten (children between 4 and 6 years). There are four main types of nursery schools - public, private, parochial, and federally financed. The nursery schools give great attention to the psychological, emotional, social, and moral development of the child. Kindergartens are public, private, or church supported. They serve as a transition between home and school, and stress "readiness" for school. The child's emotional, social, and moral development is given particular attention.

Elementary education, covering grades 1 through 6, or 1 through 7, caters to children between the ages of 6 to 12 or 14.

The elementary schools are usually divided into a primary unit K (grades 1 through 3), an intermediate unit (grades 4, 5, and 6), and the upper grades, 7 and 8. Another recent approach is to establish a "4-4-4" plan, on which the first four years are the elementary school, the second four years are "the middle school," and the last four, the high school.

There is, however, an increasing tendency to disregard grades, and to consider the primary and intermediate units as separate entities. Under this system, the child would progress through the primary unit as rapidly as his abilities would permit.

The sizes of elementary schools vary, and depend on the population and needs of the district. As a result of consolidation and merger of school districts, small one-teacher schools are disappearing, and large urban schools are taking their place.

Secondary education covers grades 9 through 12 (in some southern states it has included grades 8 through 12), and is especially tailored for the years of adolescence. It can be divided into senior high school - usually grades 10, 11, and 12, and junior high school - grades 7, 8, and 9. There are some regional variations. Secondary education consists also of specialized schools - technical, vocational, continuation, evening high schools, etc.

Major Concepts. Varying organizational modifications have been introduced into schools such as: Ability Grouping, Departmentalization, Individualized Instruction, "Core Instruction," Team Teaching, and Independent Study.

Adult and Continuing Education. Continuing education is provided by several institutions: the Junior College, the Community College, the technical institute, and the adult high school programs. Adult education programs are carried on by local school districts; community organizations, (YMCA, YWCA, Boy and Girl Scouts, etc.); nonprofit cooperative groups (such as the Institute of Lifetime Learning in Washington, D.C.); programs carried on by colleges and universities both on and off the campus, and through the medium of television; museums, libraries, etc.; churches and other religious groups; and corporations and labor unions.

Financing Public Education. Local property taxes pay more than half the cost of operating the nation's schools, and the state gives some additional assistance. Aid from the federal government offers grants for institutional materials, teacher training programs, guidance and counseling, vocational education, etc.

Middle and upper income communities often engage in restrictive zoning in order to discourage multiple dwelling units and main subdivisions. These could bring a larger ratio of children to assessed property, and would therefore further increase property taxes. Difficulties faced by ethnic minorities and low-income families in finding adequate living and housing conditions are further compounded by zoning.

The enrollment and daily attendance of pupils in the school districts affect the budgets allocated by the states to the school districts.

The Superintendent's Role. The role of the Superintendent includes: initiation and execution of policies for the government of the schools; nomination or recommendation of all supervisors, teachers, and other school employees; administration of all instruction and management of all pupils; development of curriculum and the improvement of instruction either directly, or through principals, supervisors, or staff committees; and recommendation of textbooks, instructional supplies, and school equipment.

The Principal's Role. The role of the Principal includes: continuous study of the school and its program, its needs, and its relations with its community; information and instruction concerning the needs and tasks of the school through his personal activity in the school and in the school neighborhood; promotion of the functioning of school government democratically in all aspects of the school operation; representation of the school, the activities, and program to the parents of children in the school, and to the general public in the school neighborhood; constant evaluation of the state of school public relations, and planning for improvement; responsibility to the Superintendent for the continuous maintenance of quality in curriculum and effectiveness in instruction, and for keeping up his buildings and supplies; and concern with building planning, attendance records, administration of health service, management of classroom teaching, and guidance programs.

Problems and Unmet Needs in Education. Public education is being increasingly scrutinized and evaluated by the public. Equality of instructional opportunity; curriculum; teacher preparation; teacher organization; federal aid to education; religion and its role in the schools; the length of the school day and year; new approaches to financing schools; implementation of civil rights decisions by the county or school district; new approaches to the education of the culturally deprived and other special groups of children; and many other important problems and issues are being studied, and solutions

are being sought in school districts throughout the nation.

The Library. There are numerous types of public and private libraries, including:

Public libraries, offer fiction and reference books. They are open to residents of a community, and are supported by public funds.

County libraries, which are usually referred to as branch libraries for the community.

State libraries, which are maintained by state funds and contain specialized selections of materials made by staff members.

School libraries, which provide instructional, general, and cultural reading material for the schools. These are established and financed by the school district.

College libraries, which keep instructional and research material, and books for faculty and students.

Special libraries, which provide material for special organizations, such as trade groups or professional groups.

Functions of Libraries. The main functions of libraries include: having books available; preparation of material and books in the library for ease of selection; providing service to library users; and helping library users in use of card catalog, reference books, and other available materials.

Organization of Libraries. A main objective of the organization of libraries is to provide adequate space and facilities for library staff to do library work. Floor space and equipment are needed for: keeping files; buying books and materials; inspecting incoming books; returning and exchanging material; preparing payment for bills; and checking and ordering periodicals. Equipment is needed for desk space to work on, and includes typewriters, file for correspondence, office machines, duplicating equipment, etc.

Major Tasks. Seven major tasks are performed by library workers tending to cut across the various types of libraries. Generally, these tasks may be grouped as:

Book Selection. The types of books, periodicals, and represented publishers will differ as the types of libraries differ.

Each publication and the number of copies needed in each library must be carefully chosen by the librarian.

Book processing, which includes the structure of the book and the handling of books. The structure of the book includes the binding, the preliminary pages, the text of a book, the last part of the book - the reference material.

Classification. Books are classified to permit easy quick location in the library. Characteristics of classification include an orderly system for arranging books on shelves; a simple system for locating a subject on the library shelf; a brief, but easy-to-understand, number for each book; a symbol system to make returning books to a shelf simple; a system providing an easy method of charging books to borrowers; and an alphabetical index (card catalog) for ease of finding and using books.

Cataloging. Books are sorted, marked, and grouped together on the library shelves, so that the reader may save time in selecting and finding his material. Call numbers (symbols that identify the book) are marked on the spine of the book. The Dewey Decimal System is used widely for classifying and cataloging books, before they are put on the shelves. In this system, the subject must be known (main classification), the form in which the subject is treated (standard subdivision), and into which group the subject falls (secondary summary table). The Dewey Decimal System is broken down into further subdivisions and subsections. All this information is gathered and printed on catalog cards. Other systems of classifying books include the Library of Congress System, the Cutter Tables, and other systems.

The card catalog is an alphabetical index to the library, arranged on cards in card-catalog trays. These cards are mainly grouped as author, title, subject, cross reference, and analytic cards.

Circulation Procedures. Each book has a book envelope into which is placed a book card; this is used when a borrower takes a book from the library. In school libraries the borrower's identification on the book card is his name and sometimes his homeroom number. In public libraries the borrower has an identification card which must be presented in order to borrow books. The purpose of the lending system is to maintain a record of the book borrowed, to whom it is lent, and for what length of time.

Care and Handling of Periodicals. These items are stamped with the library stamp of ownership. Some libraries use clear vinyl covers on the periodicals to protect them. Other libraries use a heavy tape along the inside cover margins and on top and

bottom to hold cover firm. A record card is kept with name of the periodical, date each issue is due, date subscription expires, and space for checking each issue on arrival.

Audio-Visual Equipment and Machines. Audio-visual materials include motion-picture projectors, chalk and display boards, records and record players, radio, television and sound systems, opaque projection equipment, 8mm film loops, filmstrips, slides, microfilm, and microfiches. The basic machines in library work include typewriters, Multilith, offset press, Mimeograph, Xerox, Cardmaster, phone and intercom, and adding machines.

STUDENT LEARNING ACTIVITIES

- Make a list of the leading educational organizations and discuss each one.
- Participate in discussion on the role of educational services at the local, state, and national levels.
- Write a short report on educational organizations and their role at the different levels.
- Identify at least four general objectives of education.
- Make a list of the fundamental purposes of the Office of Education.
- Demonstrate knowledge of the powers and duties of the federal government and the school districts by participating in group discussion.
- Study a chart on the vertical structure of public education and make a list of its main divisions.
- Prepare a short oral report on one major concept of the American school system and present it to your peers for discussion.
- Read file on adult and continuing education, and the programs available in your local school district, and discuss your own needs in this area.
- Discuss the financing of public education, stressing taxes, the effect of zoning, and the Average Daily Attendance (ADA) base.
- List the programs in your local school district which are paid for by federal funds.

- Familiarize yourself with the boundaries of your local school district and discuss the effect of zoning.

- Find out the number of people living in your school district, and the number of pupils going to public school in your district. Make a list of these statistics, and discuss the ADA base.

- Meet Principal from a local school and ask questions about his role and that of the Superintendent.

- List at least four activities of a Superintendent and four activities of a Principal.

- Familiarize yourself with some of the problems and unmet needs in education through discussion. Select one problem and write a short commentary on it.

- Make a list of the types of libraries and describe the materials found in each.

- Visit a local library, observe the functions of the library, and discuss with the staff the duties they performed.

- Make a list of the functions of a library.

- Discuss the following major library tasks and their operation:

  book selection
  book processing
  classification
  cataloging
  card catalog
  circulation procedures
  care and handling of periodicals

- Write a summary report on three major tasks of a library.

TEACHER MANAGEMENT ACTIVITIES

- Collect and make available to students information on educational organizations.

- Provide information about the changing role of education, stressing the new types of schools and the evaluation of schools.

- Collect and make available to students a file on the function of the federal government and the types of local school districts. Discuss the powers and duties of each.

- Provide a chart and discuss the vertical structure of public education.
- Assign to each student one major concept of the American school system and have him prepare a short oral report on it to be presented to the class.
- Provide and make available to students a file containing information on adult and continuing education, and the programs available in the local school district.
- Collect and make available to students a file on taxes, federal funds, local school budgets, etc.
- Arrange to have a Principal from a local school speak to students and answer any questions they may have.
- Arrange for students to visit a local library, meet the staff, find out their respective functions, and observe the typical duties being performed.
- Arrange time for discussion with the library staff.

RESOURCES

Career Opportunities in Service to the Disadvantaged and Handicapped, U.S. Government Printing Office, 1967.

Public Education in America: A Foundation Course, Appleton-Century-Crofts, 1961.

American Education (monthly), Office of Education, Department of Health, Education, and Welfare, U.S. Government Printing Office, 1965.

New Careers and Roles in the American School, Bank Street College of Education, 1968.

Administration of American Public Schools, Harlan L. Hagman, McGraw-Hill, 1951.

Forces Affecting American Education, National Education Association of the United States, 1953.

School Boards in Action, American Association of School Administrators, twenty-fourth yearbook, 1958.

Librarian, California Department of Human Resources Development, 1970.

Behind the Scenes At the Library, Edith Busby, Dodd, 1960.

Books, Libraries and You, Jessie E. Boyd, Charles Scribner's Sons, 1965.

Training Laymen in the Use of the Library, George S. Bonn, State of the Library Art Services, Rutgers University Press, 1960.

Who in the World Wants to Be A Librarian? American Library Association, 1968.

Be A Black Librarian, American Library Association, 1969.

The World of the Special Librarian Is a World of Information, Special Libraries Association, 1971.

Data Sheets on Special Librarianship, Special Libraries Association, 1968.

Your Future in Elementary Education, Harcourt, Brace and Jovanovich, (Sound Filmstrip, color, 15 min., purchase), 1969.

Teachers, Librarians and Children: A Study of Libraries In Education, Shoe String Press, 1965.

A Library Card Catalog, General Electric Laboratory, (Audio Tape Reel), 1969.

Museums and Education, Random House, 1967.

Unit 3 Function and Duties of Workers

INSTRUCTIONAL OBJECTIVES

1. Ability to discuss the general operations and the duties of workers in schools, libraries, and museums.
2. Ability to describe the three major categories of duties performed by workers in educational services.
3. Ability to compare and contrast the general duties of workers in educational services.
4. Ability to describe the duties and the activities of selected workers at the preschool, elementary, and secondary levels.

CONTENT

Role of Workers in Educational Services. Workers in educational services are engaged in many capacities, variable with each educational level. In *kindergarten*, the teachers introduce the transition between home and the outer world for young children. They help to develop the children's curiosity and zeal for learning, while stimulating their ability to think. They provide them with experiences in play, music, art work, stories, and poetry, and introduce them to science, numbers, language, and social studies. Frequently the school day is divided between two different groups, and the teacher works with a morning and an afternoon class.

Elementary school teachers usually work with one group of pupils during the entire school day, teaching several subjects, and supervising various activities, such as lunch and play periods. Sometimes, teachers in the upper elementary grades may teach one or two subjects to several groups of children. Special teachers give instruction and assist classroom teachers in certain subjects such as art, music, physical education, industrial arts, foreign languages, and homemaking.

Secondary school teachers more generally specialize in a particular subject. They teach several classes every day, either in their main subject, in related fields, or both. Besides teaching, secondary school teachers plan and develop teaching materials, develop and correct tests, keep records, make reports, and perform other duties.

Qualified school teachers may advance to department heads, supervisors, assistant principals, superintendents, or other administrative offices.

The preprofessional worker in educational services fills an auxiliary role, which can be quite variable. His main function is usually as an aide to a professional person, thereby freeing teachers, librarians, and museum curators to perform the professional functions for which they were educated.

Preprofessionals in Schools. The major tasks to be performed by preprofessional workers in educational services are usually defined by those with whom they will be working - the principal, classroom teacher, special teachers, librarians, and museum curators. Entry level jobs in each of the three categories indicated should be viewed as developmental. Flexibility and awareness of impeding possible expansion or modification in the tasks given the worker should be paramount.

The duties of the preprofessional workers can be divided into three main categories, which serve as overall frameworks, within which they function.

Housekeeping duties, covering the various preparational and cleanup duties which facilitate the role of the teacher or the professional staff. Examples include such items as: obtaining supplies from storage room; checking room to ensure good ventilation, lighting, and seating arrangements; erasing blackboards; cleaning and putting away art supplies; setting up and cleaning labs for experiments and demonstrations; passing out supplies and equipment; etc.

Clerical duties, including keeping of records concerning individual children or certain activities as suggested by the teacher. Some instances are: taking attendance; keeping roll books and health records; assisting in school office; filing and sorting; filling out library cards; preparing seating arrangement charts; arranging bulletin board displays; grading papers with the teacher's key; locating library materials; and helping prepare report cards.

Instructional assistance duties, which require some semiprofessional skills, and are performed at the request or suggestion of the teacher, after he has introduced the academic

material. These duties may include: helping plan and supervise field trips; helping with reading, mathematics, spelling, and social studies; supervising study halls or lunchrooms; taking charge of one section of the class while the teacher works with a smaller group; providing assistance in seating procedures; assisting in art, music, and physical education classes; assisting in specialized classes (i.e., home economics, industrial arts, etc.); assisting in remedial education; working with students who have been absent; helping with term papers and book reports; conducting role-playing sessions; counseling students; and talking with parents.

Levels of Work. Educational services can be divided into three main levels. At the *preschool level*, the emphasis is on opportunities for creative expression and socialization, depending on the particular needs of the teacher. Workers at the aide level will perform preparational and cleanup duties which do not require instructional or professional skills or background, such as: preparing paint and chalk supplies; obtaining supplies from storage room; preparing play dough; helping tie shoes; helping children put blocks away; keeping the roll book; taking attendance; reading stories to the children; helping children with word recognition; supervising field trips and buses; supervising recreation periods; etc.

At the *elementary level*, the emphasis is on the opportunities for creative, social, and instructional expression. Workers at the preprofessional level perform preparational duties which do not require instructional or professional skills or background, of these general types: preparing paint and chalk supplies; preparing play dough; escorting children to libraries; participating in playground games; supervising the distribution of textbooks, supplies, and equipment; helping children with reading, arithmetic, spelling, and word recognition; supervising halls, lunchroom, recreation periods; and arranging bulletin boards and displays.

At the *secondary-school level*, the worker at the preprofessional level carries out various tasks, including college preparatory and vocational training. The emphasis is again on the creative, social, and instructional expression, depending on the particular needs of the teacher. The duties will include preparational and cleanup activities which do not require instructional or professional skills or background, such as: obtaining supplies from storage room; cleaning and putting away art supplies; setting up and cleaning labs for science demonstrations and experiments; keeping the roll book, health records, and attendance; arranging bulletin board displays; procuring audio-visual equipment and operating machines; supervising study halls; helping to plan and supervise field trips;

helping with term papers; counseling students; and conducting role-playing sessions.

Professional Workers in Libraries. The duties of educational services workers in libraries vary with the size and type of library. Usually they include furnishing information on library services, facilities, and rules. Library workers assist readers in locating books and other materials through the use of card catalogs and indexes. They classify and catalog books and other loan items, publicize library services, study the reading interests of people served by the library, and provide research and reference services to various groups. Library workers may also review and abstract published materials and prepare bibliographies.

Preprofessionals in Libraries. Preprofessional workers work under the supervision of professional librarians, and may be responsible in turn for supervising clerical staff. They may do some descriptive cataloging of books, such as identifying the title, author, edition, publisher, publication date, and number of pages. They may maintain files of special materials such as newspaper clippings and pictures, and arrange displays.

In large libraries, the educational services preprofessional workers may maintain controls on checkouts, reserves, renewals, and overdue materials. They may operate and maintain audio-visual and data processing equipment, including phonographs and tape recorders, as well as reading aids that magnify, project on a screen, and sometimes print out information on microfilm and microfiche cards. In addition, they may also train and supervise clerical staff.

Salaries. The salaries of educational services workers vary widely with the level of the service and the geographical location. The average salary at entry level for a preprofessional is $4,000 per year, while the mid-career average is $5,500 per year. The average beginning level salary for a professional is $7,200 per year, while the top average is $11,500 per year.

Conditions. The administration and staff of each school, library, and museum will make their own policies regarding the duties of educational services workers. In schools the duties may include work with one teacher, or some system of sharing with other teachers may be worked out. In other instances, workers might be assigned to special personnel on an ongoing basis, and accompany them from place to place or activity to activity. The work is performed during the day and seldom

involves hazardous activities. It is usually done inside in pleasant surroundings.

STUDENT LEARNING ACTIVITIES

- View films on: *Careers in Education* and *Teacher Aides: A New Opportunity*.
- Visit a local school, meet the staff and faculty, and observe typical instructional, clerical, and housekeeping duties performed by workers in educational services.
- Talk to the educational services workers and ask questions about the instructional, clerical and housekeeping duties performed.
- Discuss in small groups the general operation of schools, libraries, and museums.
- Write short summaries on the activities observed during field trips.
- Visit a local elementary or secondary school and observe activities in at least three different grades.
- View film concerning teaching secondary schools, *High On Teaching*.
- Participate in discussion on the major tasks of educational services workers, thus becoming familiar with housekeeping, clerical, and instructional duties of such workers.
- Identify the three main categories of tasks, define them, and list at least six examples for each category.
- Search out information about the conditions of educational services workers, and report findings to class.

TEACHER MANAGEMENT ACTIVITIES

- Divide class into three groups and assist each group in preparing a presentation covering each of the major tasks and duties of workers in educational services.
- Arrange for students to visit local school, library, and museum to meet staff and/or faculty, as well as to observe workers performing different duties.
- Arrange room facilities and time for discussion with educational services workers.
- Organize and lead discussion on general operation of schools, libraries, and museums.

- Arrange a display of information concerning educational services, to include books, pamphlets, information folders, etc.

- Discuss with class the variety of activities performed by people in schools, libraries, and museums.

- Organize a discussion on the major tasks of educational service workers. Define and discuss the three main categories of duties in detail to include housekeeping, clerical, and instructional duties.

- Arrange and lead the discussion on the general operations of schools, libraries, and museums, and stress the comparisons and contrasts of the activities of the entry level jobs in each job family.

RESOURCES

Planning Your Career, Robert Calvert, McGraw-Hill, 1963.

Measuring Educational Progress, Donald David, National Cash Register Company, Conference on the Use and Role of Teacher Aides, 1969.

A New Career in Education: The Role of the Teachers' Aide, Multimedia Publishing Corporation, 1969.

New Careers and Roles in the American School, Bank Street College, College of Education, 1970.

An Invitation to Teaching, Association for Childhood Education International, 1969.

Teachers in Early Childhood Education, California Department of Human Resources, 1968.

The ABC's of Teaching in Elementary School, American Association of Elementary, Kindergarten, Nursery Educators, NEA, 1971.

The Role of the Classroom Teacher, Great Plains National TV, (Kinescope, black and white, 30 min., purchase), 1969.

The Role of the Teacher in the Classroom, Paul S. Amidon and Associates, 1969.

Teachers at Work in the Elementary School, Bobbs-Merrill, 1969.

Teacher Aides at Work, National Education Association, 1967.

High On Teaching, National College of Education, National Center for Information on Career Education, (Film, 25 minutes, color, free loan), 1967.

Librarians Wanted: Careers in Library Service, Adrian A. Paradis, David McKay Company, 1959.

Living With Books, Helen Haine, Columbia University Press, 1950.

Adult Education Activities in Public Libraries, Helen Lyman Smith, American Library Association, 1954.

Be A Black Librarian, American Library Association, 1969.

Who In the World Wants to Be a Librarian? American Library Association, 1969.

Training Laymen in the Use of the Library, George S. Bonn, State of the Library Art Series, 1960.

Books, Libraries, and You, Jessie Boyd and Others, Charles Scribner's Sons, 1965.

Behind the Scenes At the Library, Edith Busby, Dodd Mead & Co., 1960.

An Introduction to Library Science, Pierce Butler, University of Chicago Press, 1961.

The Teacher-Librarian's Handbook, Mary Peacock Douglas, 2nd Edition, American Library Association, 1949.

Librarian, Universal Education and Visual Arts, (Film, color, 16 min., purchase), 1969.

The New School Librarian, Shoe String Press, 1968.

Behind the Scenes in a Museum, Visual Education, (Filmstrip, black and white), 1969.

The Museum Serves the Community, Visual Education, (Filmstrip, black and white), 1969.

Unit 4 Profile and Recommended Qualifications of Workers

INSTRUCTIONAL OBJECTIVES

1. Ability to discuss the recommended qualifications of an educational services worker, including age, education, and background qualifications.

2. Ability to evaluate his own qualifications required for entry level jobs.

CONTENT

Age Level. The age level of educational services workers varies greatly. Some workers start as early as age 16, while others continue until 65 years of age. The usual age range, however, is between 22 and 55 years of age.

Educational Level. At the preprofessional entry level most educational services workers hold a high school diploma; some have college educations. Older people at entry level jobs often hold a G.E.D. certificate, or are currently entrolled in a G.E.D. program.

Schools. At the professional level all states require that teachers in the public schools have a certificate. Teacher certification in most states also requires at least the equivalent of one-half year of education courses, including practice teaching, plus professional courses in subjects commonly taught in schools. After gaining experience, teachers can transfer to higher levels of teaching for which their training and experience may qualify them. Teachers may advance to department heads, supervisors, assistant principals, principals, superintendents, or other administrative officers as openings occur. At least one year of professional education beyond the Bachelor's degree and several years of successful classroom teaching are required for most supervisory and administrative positions. A doctorate is often required for appointment as superintendent. Some experienced teachers are assigned as part- or

full-time guidance counselors, or as teachers of handicapped or other special groups of children. Usually, additional preparation and sometimes special certificates are required for these assignments.

Libraries. In many libraries, workers at the preprofessional entry level are trained on-the-job in programs that require one to three years to complete. The trend is towards preparation for library work in formal post-high school programs. Some colleges offer a two-year program for library workers, which leads to an Associate of Arts degree in library technology. Many college programs for library aides were established initially to meet a particular local need, hence may vary greatly in objective and content. Students who may be interested in becoming professional librarians should select a program with great care since credits earned in all two-year college programs in library technology are not necessarily applicable toward a professional degree in library science.

To qualify as a professional librarian, the student must usually have completed a course of study in a graduate library school. The attainment of a Bachelor's degree is usually followed by a fifth year of specialized study in library science, after which a Master's degree is conferred.

Many students attend library schools under cooperative work-study programs, combining their academic program with practical work experiences in a library. Most library schools make every effort to arrange the student's schedule to permit him to take the necessary courses while working part-time. Scholarships, numerous loans, assistantships, and financial aids for study in library science are available.

Attitudes and Values. The educational services worker should have the ability to perform assigned tasks, and should be willing to learn and to work with young children and their families. He should have an awareness of the concerns, needs, and desires of people in his neighborhood, and should be able to sympathize with people, have a sense of humor, and enjoy working with individuals and groups.

STUDENT LEARNING ACTIVITIES

- Study and discuss material on age, education, background specifications, and recommended qualifications of an educational services worker.
- Analyze own qualifications and compare with the recommended qualifications for educational services worker.

- Write a short report on the analysis and comparison of own qualifications with the recommended qualifications for educational services worker.

TEACHER MANAGEMENT ACTIVITIES

- Prepare material on the age, education, and background qualifications of an educational services worker.
- Provide opportunity for small group analysis and comparison of students' own qualification for educational services worker.

RESOURCES

New Careers for the Subprofessional, U.S. Government Printing Office.

Career Opportunities in Service to the Disadvantaged and Handicapped, U.S. Government Printing Office.

Career Counseling (Yearbook), T & I Division, American Vocational Association.

Do Teachers Make A Difference? U.S. Government Printing Office.

Teaching: A Career for a Man, Phi Delta Kappa.

Teaching As a Career, American Federation of Teachers.

Careers in Education, National Center for Information on Careers in Education.

New Careers and Roles in the American School, Bank Street College of Education.

Requirements for Certification of Teachers, Counselors, Librarians, Administrators for Elementary Schools, Secondary Schools, Junior Colleges, National Education Association, 1967.

The Teacher and Administrative Relationships in School Systems, Macmillan, 1968.

Libraries and You, Channing L. Bete, 1969.

Library Instruction Guide: Suggested Courses for Use by Librarians and Teachers in Junior and Senior High Schools, Shoe String Press, 1967.

Unit 5 Career Lattices and Mobility

INSTRUCTIONAL OBJECTIVES

1. Ability to identify preprofessional entry level jobs in the education, library, and museum job families.

2. Ability to construct a typical "career lattice" for the education, library, and museum job families.

3. Ability to describe typical entry level jobs for preprofessional workers in the education, library, and museum job families.

CONTENT

Entry Level Jobs. A career lattice is a series of positions of gradually increasing difficulty. The first step on the lattice is usually referred to as "entry level." Entry level jobs require minimal skill and education, and are usually open to workers without prior work experience in that job. Examples of entry level jobs in educational services are:

Schools - Teacher Aide, Counselor Aide, or School-Community Aide

Libraries - Library Aide

Museums - Museum Aide

Aides in schools give assistance by performing housekeeping, clerical, or instructional duties. In libraries and museums, the work of aides consists mainly in performing clerical or housekeeping duties.

Typical Career Lattices. There are clearly identifiable career lattices in the three major job families in educational services. The lattices shown in Figures 6, 7, and 8 are based

on large organizations or systems. Accordingly, the number of positions might be reduced in smaller organizations. While the career lattices emphasize preprofessional jobs, they also include professional positions.

The career lattices illustrate the presence of the opportunities for upward mobility in the major job families. Implicit in the upward mobility is the difference between "jobs" and "careers." Job training connotes training for a position which may or may not have permanence. Career training involves progress through clearly defined steps (work, and/or education) leading to a desired career.

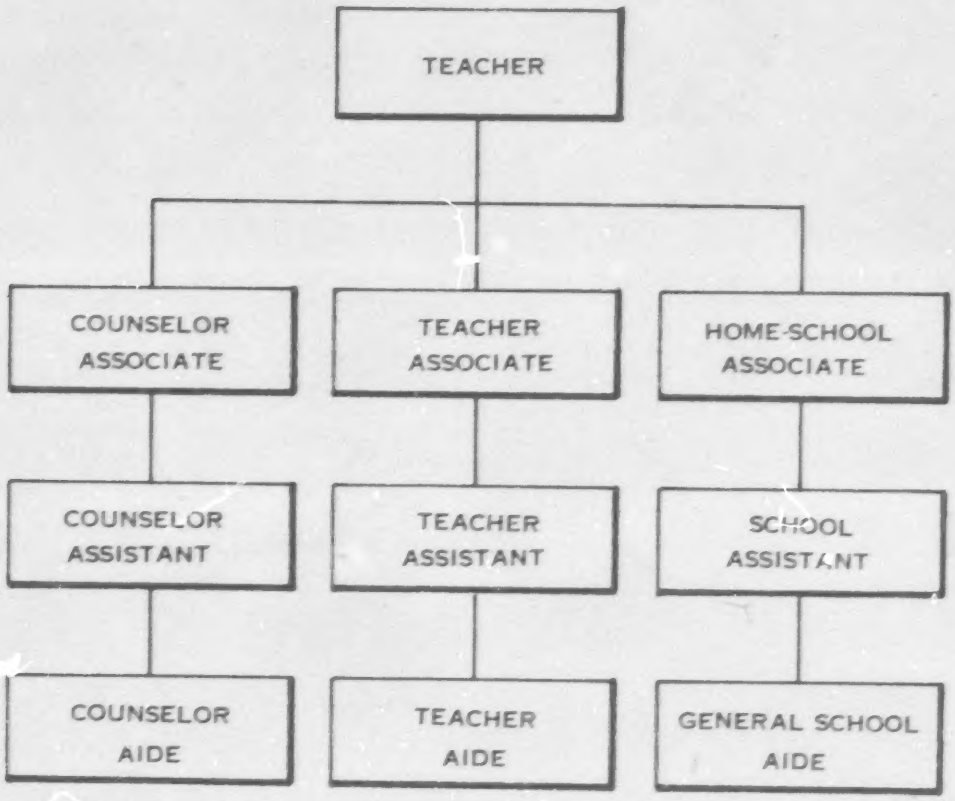

Figure 6 - Typical Career Lattice - Schools

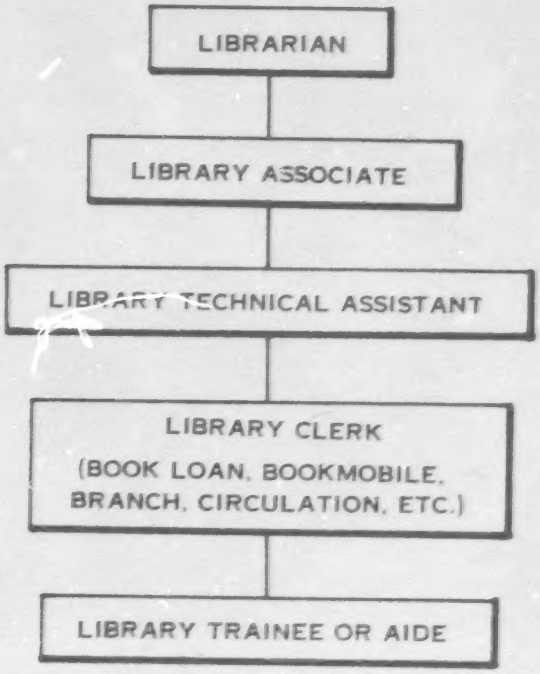

Figure 7 - Typical Career Lattice - Libraries

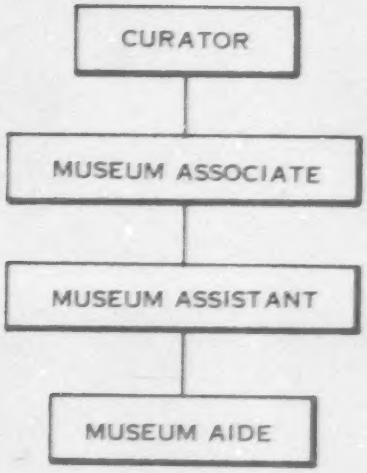

Figure 8 - Typical Career Lattice - Museums

STUDENT LEARNING ACTIVITIES

- Define the following terms: career lattice; career mobility; and entry level job.
- List and describe at least one preprofessional entry level job found in each of the major job families in educational services.
- Discuss with other students or a counselor the typical activities of each entry worker in educational services.
- Construct a typical educational services occupations career lattice for one job family to show the upward mobility of the career lattice.

TEACHER MANAGEMENT ACTIVITIES

- Prepare a bulletin board display of a "career lattice," showing photographs and a job description for jobs in a specific educational services career family.
- Organize students into small groups to discuss typical activities of each entry level job.
- Discuss educational services occupations career lattice for the three main job families and discuss concept of upward mobility.

RESOURCES

Dictionary of Occupational Titles, U.S. Department of Labor, U.S. Government Printing Office, 1965.

Educational Placement Guide, National Center for Information on Careers in Education, 1969.

Careers in Education With Your Federal Government, U.S. Civil Service Commission, 1970.

Teaching As a Career, American Federation of Teachers, 1968.

New Careers in Education, National Institute for New Careers, University Research Corporation, 1970.

Museums Today and Tomorrow, Universal Publishing, (Filmstrip, black and white, 36 frames), 1969.

Unit 6 Employment Prospects

INSTRUCTIONAL OBJECTIVES

1. Ability to identify at least three sources of information and statistics concerning employment outlook in educational services.

2. Ability to compare data dealing with the employment expectations of jobs in educational services with their own job goals.

CONTENT

Employment Outlook. It is estimated that approximately four million persons are employed in the field of educational services throughout the country in various professional and preprofessional positions. The initial impetus for the preprofessional movement in the educational services field was in response to severe manpower shortages at the professional level. In the schools, the need for help was typified by the increasing complaints of teachers that they had little time to teach. Similarly, the increasing volume of information being produced was overwhelming the professional in the library field. Use of noncertified preprofessionals became a necessity in the face of a dearth of professionals.

The manpower crisis in much of the educational services field seems to be coming to an end, at least in well-populated areas. Having enough people to do all the work in schools, libraries, or museums is becoming a secondary concern. A more important consideration is having the kind of staff which can deliver the quality of service that is consistent with the educational needs of people.

Because of the large size of the educational services profession, a substantial number of jobs will open each year from retirements and other leavings. Turnover is high - as much as 10% in some cases - since many educational service workers are young women who marry and retire from the profession.

Use of Preprofessionals. The movement to establish preprofessional personnel as regular members of the school teaching staff, library staff, and museum staff has gained momentum, and, more importantly, support from public schools, professional organizations, teacher training institutions, and civil service agencies. Colleges and universities have also become involved in educating and certifying preprofessionals recruited especially from the "disadvantaged" population.

The jobs of library assistant, teacher aide, etc., are becoming increasingly important because of the realization that nonprofessional and semiprofessional personnel can and should relieve professionals from repetitive detail. It is clear that the use of preprofessionals is becoming a common practice in educational services.

Sources of Employment Information and Statistics. Most libraries offer a wide range of books which describe the employment opportunities available in the educational services. The *Occupational Outlook Handbook* and the *Occupational Outlook Quarterly* are two excellent sources of information.

Information may also be obtained from State Departments of Employment, or the U.S. Department of Labor, Bureau of Labor Statistics. Most state employment services offer a large supply of brochures concerning the employment outlook of specific jobs. Usually single copies of such materials are available free of charge. The following professional associations also have materials concerning employment prospects:

Education - National Education Association
1201 Sixteenth Street, N.W.
Washington, D.C.

American Council On Education
1785 Massachusetts Avenue, N.W.
Washington, D.C.

Libraries - American Library Association
50 E. Huron Street
Chicago, Illinois 60611

Special Libraries Association
235 Park Avenue, South
New York, New York

STUDENT LEARNING ACTIVITIES

- Study file on statistics and information on the expectations of jobs in educational services.

- Discuss career possibilities and requirements for employment as a teacher aide in your school district.

- Learn about the employment opportunities available in your own area in: university extensions, junior colleges, colleges or universities, adult education, recreation departments, technical schools, private agency programs, etc.

- Discuss local continuing education programs available to professionals and aides in educational services who want to improve their professional skills.

- Collect and discuss information on the requirements to enter an institution of higher education to prepare for a professional level position in educational services.

- Discuss and compare employment goals with the statistics and information on the expectations of jobs in educational services.

- Write a short summary of your employment goals.

TEACHER MANAGEMENT ACTIVITIES

- Prepare file of statistics and information concerning the expectations of jobs in educational services and make it available to students.

- Arrange for and lead discussions concerning career possibility and requirements for "merit promotion" of aides in local school districts, libraries, or museums.

- Arrange for students to visit the local office of the state employment service and discuss the employment outlook for educational services.

RESOURCES

Occupational Outlook Handbook, U.S. Government Printing Office, 1970-71.

New Careers for the Subprofessional, U.S. Government Printing Office, 1970.

Teaching Opportunities: A Directory of Placement Information, U.S. Government Printing Office, 1969.

Educational Placement Guide, National Center for Information on Careers in Education, 1970.

What We Need to Know About Educational Manpower, U.S. Government Printing Office, 1969.

Your Future in Elementary Education, Harcourt, Brace and Jovanovich, (Sound, Filmstrip, color, 15 min., purchase), 1969.

Qualities of Experience and Educational Philosophy, College and University Press, 1969.

Key to a Future, (Librarian, Career), Winey Productions, (Film, color, 16 min., purchase), 1969.

Section 4

RESOURCES MANAGEMENT

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Section 4

RESOURCES MANAGEMENT

Unit 1 Nature of the Field

INSTRUCTIONAL OBJECTIVES

1. Ability to identify at least four major job families found in the field of resources management.
2. Ability to list and describe at least six natural resources which governmental agencies frequently are responsible for managing.
3. Ability to identify the difference in the types of resources management activities performed at the federal and local level.
4. Ability to compare and contrast the general functions of workers within resources management.

CONTENT

Natural Resources. Forests, rangelands, minerals, wildlife, air, and water are all a part of this country's natural resources. Many governmental agencies at the federal, state, and local level protect, manage, and develop these natural resources to assure that they are not needlessly exhausted, destroyed, or damaged, and that future needs for these resouces will be met.

Major Job Families. Within resources management there are six major job families: parks; forests; agriculture; conservation; fish and game; and pollution control.

Generally speaking, these six job families are concerned with preserving, managing, and restoring natural and/or man-made environments within the public domain. Workers in the field of resources management perform a broad range of duties in accordance with the type of public service organization by which they are employed.

Major Components of Resources Management. The role of workers in resources management has many components, and varies by location and type of resource involved. Resources management, in general, has nine major components within the job families listed above, which serve as an overall organizing framework to show the scope of this important field.

Parks. Parks are the concern of local, county, state, and federal agencies. Workers in this area are charged with tending both the mounting flood of visitors and the physical facilities. The park worker at the preprofessional or professional level must be a host, educator, enforcer, protector, and custodian of the natural features or historic monuments his park is designed to preserve.

Forest Management. Most of the nation's forests are managed on a multiple-use basis, which includes watershed management, mineral resources, recreation, land classification, and grazing.

One of the most common jobs found in Forest Management is that of the forester. Foresters perform professional tasks associated with the sale of timber, road location, surveying, cruising, timbering boundaries, appraising, and sale administration. They also work up plans for logging, slash disposal, reforestation, and rehabilitation of land in the public domain.

Not all forestry management positions are related solely to timber sales. Some deal exclusively in administration, in public information and management, or various specialties.

Agriculture. The U.S. Department of Agriculture, through its system of county agents, has provided crop production, insect, and disease control; managed farm subsidies; and provided technical assistance to farmers. Many of the positions in this area of resources management require a graduate degree and several years of practical experience.

Watershed Management. This activity provides for the installation and maintenance of the land treatment and water control structures necessary to conserve the soil and to provide for improvement of watershed conditions. It provides for soil stabilization and improvement of water quality, and reduces off-site and on-site damage from flooding and soil erosion. This includes such activities as: soil analysis, range resource surveys, and trend studies. Professional level workers also participate in range and wildlife management programs.

Protection. Public lands controlled by state and federal governments are valued in the billions of dollars and are

continually threatened by a variety of hazards. For this reason, this component is involved in suppression of fires; the reduction of damage from insects, diseases, and animals; and pollution control activities.

Minerals. Mineral resource management involves all minerals, including energy resources, and also covers the different types of mining operations. Mineral specialists with the Bureau of Land Management, for example, examine mining claims; evaluate and appraise properties and mineralized land; prepare studies; and prepare analyses of hazards to the public from minerals, mines, etc.

Most of the workers in mineral management are graduate mining and petroleum engineers, geological engineers, geologists, or mineral economists.

Outdoor Recreation - Wildlife. Increasing population, combined with the mobility and migration of populations into once sparsely populated areas of the public domain, is a major concern of resource managers. Recreation specialists are usually selected from candidates with degrees in resources management as they relate to outdoor recreation, landscape, architecture, forest recreation, park management, or regional planning; or specialized study in biology, geology, or conservation.

Environment. Man's survival requires protection and economizing of water, soil, open space, parks, and other public resources. The protection of such natural and man-made environments against destructive elements has become a major concern of government at all levels. This field includes waste water treatment, garbage collection, clear air. noise abatement, etc.

Administration. Administrative work in resources management involves budget, finance, internal audit, information, education, personnel, and related services. Most workers at either the state or federal level specialize in one of these areas.

STUDENT LEARNING ACTIVITIES

- Interview a person working in the field of resources management to determine his general functions and duties. Prepare a three-minute oral report for the rest of the class to explain what you have found.
- Identify at least six major resources being managed by local and state governments.
- Describe the field of resources management, pointing out some of the governmental agencies in your community which are concerned with it.

TEACHER MANAGEMENT ACTIVITIES

- Ask students to identify and discuss major components of resources management. Also ask them to rate their interest in each and give reasons for their decision.

- Arrange for students to visit either individually, or in small groups, local offices of state or federal agencies concerned with resources management. Examples of such visits might include:

  Forestry station,
  Agriculture experiment station,
  Dam,
  Waste water treatment plant,
  Air pollution monitoring facility.

- Discuss with students the major components of resources management, emphasizing the many agencies and organizations involved.

- Present film *Challenge for Urban Renewal*, and discuss with students the problems of unplanned migration from city to suburb, with its resulting air pollution, water contamination, and depletion of our natural resources.

- Subscribe to periodicals such as:

  American Forests
  American Forestry Association
  919 17th Street, N.W.
  Washington, D.C.

  The Living Wilderness
  Wilderness Association
  729 5th Street, N.W.
  Washington, D.C.

  Parks and Recreation
  National Recreation and Parks Association
  Pennsylvania Avenue
  Washington, D.C.

RESOURCES

Conservation, Encyclopedia Britannica Educational Corp., (Film, 16 min., black and white, or color, purchase only), 1968.

Silent Spring of Rachel Carson, CBS Reports, Available from McGraw-Hill, (Film, 54 min., black and white), 1967.

Challenge for Urban Renewal, NBC Films, (Film, 25 min., black and white, or color, purchase only), 1969.

Problems of Conservation: Forest and Range, Encyclopedia Britannica Educational.

Opportunities In Resource Management, Bureau of Land Management, U.S. Department of the Interior, 1971.

Environmental Conservation, Raymond F. Dasmann, John Wiley and Son, 1968.

Unit 2 Exploration and Conservation of Natural Resources

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the three major categories which are used to classify natural resources.
2. Ability to identify at least four present or past abuses of natural resources.
3. Ability to describe the major events which led the government to become involved in resources management.
4. Ability to discuss the concept of the new environmental and resources ethic.

CONTENT

Natural Resources. Natural resources, in a narrow sense, are those uncaptured stores which are useful to mankind in any way. They can be grouped into these three categories:

Inexhaustible Natural Resources. The atmosphere, while indispensable to life, often carries many impurities. Its moisture content, temperature, and movements in great masses we know as atmosphere, constitute what is referred to as climate. Thus atmosphere is important in determining the character of soil and land. It is clearly a natural resource which greatly affects other natural resources.

Water in its cycle is also an inexhaustible natural resource. Rainfall, runoff, ground water, rivers, lakes, oceans, and atmospheric moisture constitute an inexhaustible supply of water, which, like the atmosphere, is indispensable to life. However, if this moving water supply is to serve man, it must be managed and controlled at the very least on a regional basis.

Replaceable Natural Resources. Most of man's food and clothing,

as well as much of the shelter he requires, must come from plants which grow in soil, or from animals that feed on such plants; for this reason, soil is a natural resource of major significance. As a natural resource, soil is easily "worn out" by overuse or mismanagement; it must be maintained by human effort if it is to remain fertile.

Forests, whether left in their natural state or helped out by good management, usually renew themselves. Without assistance from man, the forest renewal process is often extremely slow. The practice of forestry management accelerates the renewal process and production of species most needed by mankind.

Grasslands and other forage resources are also important replaceable natural resources. Both livestock and game animals depend for support on the nation's vast areas of grasslands and edible wood plants. While the carrying capacities of these areas have their limits, they may produce forage indefinitely if they are not overused. Accordingly, wise regulation is required for such resources.

Irreplaceable Natural Resources. Minerals, including the metals, fuels, lubricants, and numerous nonmetallic, and nonfuel resources, are clearly irreplaceable. These resources are required by modern technology. Some of these resources, such as stone or clay, are plentiful, while others, such as mineral fuels and lubricants, are in relatively short supply.

Land in its natural condition is also an irreplaceable natural resource. Once such land is rapidly exploited or modified it cannot wholly regain its former condition.

Abuse of Resources. Recognizing the three major categories of natural resources, it is well to consider the attitudes of people, and how those attitudes have persisted and influenced the use of natural resources in the past.

When the early settlers arrived in North America they found vast forests down to the water's edge, and there seemed no limit to the woodlands, the rich plains, the sparkling waters, the wildlife, or the land itself, with its tremendous mineral deposits and apparently inexhaustible wealth.

Accordingly, they made lavish and unwise use of the natural resources. Tens of thousands of acres were given away to promote settlement. Cutting and clearing, with little thought of erosion hazards, were routine operations in subjugating the land. Poor construction practices, random cutting of forests, indiscriminate mining methods, contamination by sewage and chemicals, and haphazard community planning; all contributed to exhaustion of the land. Under these circumstances it is

not strange that these resources proved to be not so inexhaustible.

Forests gave way over a period of two hundred years to farms and pastures, until the original area of forest had been reduced from an inclusive 822 million acres to about 149 million acres of public lands classed as commercial forest and woodlands.

Water, plentiful at first, has been used to such an extent that it is often polluted and intolerable to use. Similarly, land, minerals, and wildlife were abused to such an extent that their conservation was a matter of serious concern as early as 1900.

Conservation and Resources Management Movement. As the problems of resources conservation and management became more apparent over the years, the people of this country, acting as individuals, in community groups, through state legislatures, the Congress, various federal agencies, and special groups, attempted to find ways to bring about needed change in the policies of resources management.

Early Conservation Activities. During the early 1900's, which is generally considered to be the time the conservation movement was born, great conservation leaders accepted the challenge and focused public attention on the need for conservation, largely because of destructive timber cutting practices along the way as the lumber industry moved westward, and also because of wholesale slaughter of wildlife in the West and South.

The period from 1909 to 1933 was characterized in the field of conservation activity:

- by somewhat slow, but steady, progress in the acquisition by the U.S. Forest Service of forest lands at the headwaters of navigable streams and elsewhere in the Eastern United States;
- by establishment of the principle of federal, state, and private cooperative attack on forest fires;
- by an increasing interest in the protection and development of wild animal resources;
- by recognition of, but inadequate provision for the handling of, water-power resources;
- by the development, under federal lease and regulation, of mineral resources on public lands;

- by a slow and steady awakening of certain industries and corporations to the duties and advantages of better natural resource management;

- by healthy growth in state conservation agencies;

- by a recognition of the value and indispensability of the scenic and inspirational resources of the country;

- by a considerable extension of national and state park areas;

- by continuing failure to see clearly in human powers the greatest natural resource of all.

The 1930's - Franklin D. Roosevelt was inaugurated as President in March, 1933; there were at that time large numbers of people who had lost their possessions and jobs during prior years because of the financial crash of 1929 and the physical disaster of wind erosion. These disasters, in the view of the new President, dramatized the appropriateness of a great public works program to furnish employment and to accomplish useful work in managing natural resources.

His first major step in this direction was the establishment of the Civilian Conservation Corps under the authority of an act passed by the Congress on March 31, 1933, granting broad powers to employ young men for the purpose of conserving natural resources. The "enrollees," many of whom had never previously had any opportunity for remunerative employment, were organized into companies of 200 under army officers who operated the camps, in cooperation with the project superintendents. These superintendents, with their staffs, supervised the work of forest protection, construction, forest research, forest planting and care, soil erosion control, pest control, lake and stream survey and improvement, recreational developments, flood control on federal public lands, and on state, county, and private lands where the federal government was legally authorized to cooperate.

Post-World War II - After World War II some important gains were made in the conservation movement. Probably the most notable of these were the amendment of the Materials Disposal Act of 1947, which called a halt to the abuse of mining laws, and the reenactment of the Water Pollution Control Law.

During the following decade, the Congress increased appropriations for the National Park Service and for the recreation and wild animal life activities of the Forest Service. Support of the other conservation agencies of the federal government, such as the Fish and Wildlife Service, the Soil Conservation Service, and the Reclamation Service, was continued.

The fact that some of these agencies often appeared to operate at cross-purposes does not lessen the significance of the overall increase in public awareness and congressional support of conservation needs.

The 1960's - By the 1960's there was a growing recognition in government of the urgent need to attack new and more critical problems in natural resources. President John F. Kennedy, in 1961 issued a call for a White House Conference on Natural Resources. While the conference was dominated by federal and state officials, two important laws were an outgrowth of the meeting: in 1963 a Bureau of Outdoor Recreation was established in the Department of the Interior, and the Clean Air Act became law.

A New Ethic. The wave of indignation about problems of air and water pollution which crested in the late 1960's has led our society to the discovery that we are dependent on and part of an ecosystem that we did not invent and must not destroy.

This realization has forced us to ask ourselves some very fundamental questions. Where and how do we want economic and urban growth? How can we best use and reuse our natural resources? How can we adjust our priorities to insure that we fulfill our energy, transportation, housing, recreational, and personal consumer needs without intensifying environmental problems we did not anticipate and do not want?

More and more people within our society want to participate in the development of a new environmental ethic - a way of life which will allow us to retain and improve the life-enhancing features of technology without repeating and intensifying the mistakes of the past. A central role of resource managers is to support this national effort and to help change those habits and those obsolete viewpoints which have led to our current confrontation with gross pollution and threats of irreversible environmental damage.

STUDENT LEARNING ACTIVITIES

- View films *Basic Ecology* or *House of Man: Our Changing Environment*.
- Research a topic related to an environmental problem; interview one or two local government officials concerned with pertinent resources management, and report back to the class.
- Prepare a list of examples of man's failures to manage the environment.
- Write a short summary report concerning Conservation of Natural Resources.

- Discuss the concepts of multiple uses of forest land, reforestation, rationale for watershed management, and energy resources conservation.
- Prepare a chart listing ten natural resources found in this country and determine the rate of depletion.

TEACHER MANAGEMENT ACTIVITIES

- Discuss with the class meanings of ecology, biosphere, and concepts of basic life cycles.
- Discuss with class the cycles of carbon, nitrogen, oxygen, and phosphorus. Cover the concepts of birth, growth, maturity, decline, and death.
- Divide class into manageable groups and have them prepare group presentations with particular regard to analysis of environmental problems confronting resource managers.
- Arrange for students to visit the local office of a resource management agency to discuss the work done there.
- Discuss with class questions similar to these:
  - Why are our natural resources important?
  - What would happen if no one were to manage our resources?
  - Can our natural resources last forever? Why not?
  - What federal organizations help to manage our nation's natural resources?
  - How can you help to manage and preserve our resources while you are in school?

RESOURCES

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Environmental Education for Everyone - A Bibliography of Curriculum Materials for Environmental Studies, National Education Association, Stock No. 471-14600, 1970.

Unit 3 Major National Resource Management Concepts

INSTRUCTIONAL OBJECTIVES

1. Ability to describe in his own words several of the major concepts of natural resources management currently being followed in the United States.

2. Ability to identify problem areas where conflicts of rights occur in national resources management.

3. Ability to identify causes of resources depletion and describe the potential results.

CONTENT

Man's Dependence on Natural Resources. Modern man in the United States has built around himself a complex, artificial environment of homes, cities, service areas, industrial areas, and combinations of these. At first glance he seems to be completely independent of the natural environment as he luxuriates in the achievements of his technological prowess. A second look reveals that his culture is as much a product of the natural resources in the environment as are the primitive cultures.

Man needs space for living, working, playing, and transportation. He needs clean water and pure air. He depends upon solar energy and good soil to produce his food. Mechanical conveniences, communications systems, massive buildings, and the industries that produce them, maintain the economy and the standard of living; however, all draw their sustenance from the environment. Fossil fuels and water power furnish vital energy to the cities. Man cannot be independent; his way of living is, and will continue to be, determined by the availability and use of these basic resources.

Results of Resource Contamination. The reality of this relationship becomes evident when one resource becomes contaminated

or depleted. Bacterial contamination of water resulted in the death of thousands of persons as recently as the last century. Although this type of contamination has now been controlled, problems of water supply continue to dominate the resource picture as the needs grow, and as pollution by unknown organic factors increases.

Air, too, polluted by a lethal combination of contaminants and stagnation, dealt death in the streets of London, England, and in Donora, Pennsylvania. Air pollution continues to increase in urban areas and to spread into rural areas; the extent of its damage to human life, vegetation, and the landscape is at present unmeasurable.

Degradation of the standard of living resulting from resource loss may be temporary or permanent. Mining towns, lumbering centers, and agricultural areas have depleted the resources upon which they were dependent. The subsequent collapse of the economic structure left residents with the alternatives of poverty or migration.

Man's Place. There is a pattern in nature, and man is as much a part of a larger ecosystem as is the deer in the forest. Man must consider the entire pattern and adjust to it, not merely appropriate and destroy. Long-range planning is required. The cities, the states, and the nation cannot maintain positions of wealth and leadership unless the people learn to manage natural resources wisely.

Natural Resources - A Temporary Privilege. Our possession of natural resources is a temporary privilege, carrying with it the responsibility for prudent management.

The earth's crust and its mineral content have been in the process of formation for over four and a half billion years. The entire history of modern man encompasses not much more than 7,000 to 10,000 years. During this relatively short time, the cultural evolution of man - i.e., his development in art, science, and government - has expanded and accelerated, and proportionate changes have been produced in the environment. In many instances, irreparable damage has been done to landscapes and resources developed over eons of time. The land and its natural resources have been continually exploited in man's pursuit of "progress."

Any generation can own a resource only temporarily. The generations to come will also own it temporarily, and their welfare will depend on the state of the resource when it is delivered into their hands.

Man's Abuse of Natural Resources. Early settlers in America were overwhelmed by the wealth of its resources and the seemingly astronomical abundance of wild animals. They could not envision the changes that have occurred during the last century. Mountains have been washed into rivers as hydraulic mining operations sped the search for precious metals. Dredging operations have produced thousands of acres of sterile, gravel-laden land. Overgrazing has destroyed acres of grassland and resulted in compaction, erosion, and growth of less desirable plants. Petroleum extraction has caused large land areas to subside. There are many instances of mining abuses, water diversion, and misuse and mismanagement of natural vegetation and soils; and the exploitation continues. Paving for highways and parking lots causes much of this land to be permanently lost to agricultural use. Is this the best use of the land?

Conflicting Rights. The conflicting rights of society and individuals in the utilization of natural resources must be defined and protected.

Groups of people with different interests often conflict strongly over the uses of a resource. For example, the use of public domain for profit is a recurring cause of controversy. Some individuals wish to purchase parcels of this land for economic reasons. Others, failing to realize that entire communities are dependent upon the product of public lands, look upon economic operations such as timber harvesting, mining, and livestock grazing as pure destruction. Protests also come from working people dreaming of their annual vacation of hunting and fishing or of just spending a quiet week in a cabin in the woods. Federal and state governments, in accordance with the principles of multiple use, are withholding large acreages of public lands for recreational use, but many people who want to use the public domain for recreation feel that their equity in the land gives them special privileges for whatever they desire. They see little relation between their personal pleasure and the local or national economy.

Americans prize freedom, but freedom entails responsibility. If an individual or a group fails to act responsibly, then authority must exercise controls to protect the public interests, as it has done in the following instances:

A manufacturing company wished to establish a large plant on a river, which, with its tributaries, is a spawning ground of salmon, steelhead, and striped bass. The company's operations would have caused millions of gallons of effluent to be dumped into the river, poisoning the salmon, of which 100,000 are caught annually in fresh and salt water by sportsmen, and contaminating the water used for swimming and boating as well.

This company was required by law to purify the effluent at great expense before releasing it into the river. Similarly, flagrant use of pesticides has polluted adjacent waters and caused kills of fish and wildlife. Now farmers are required to see that the use of pesticides does not destroy wildlife.

Power companies which build dams with accompanying power houses are required to release a sufficient flow of water to preserve fish life or to minimize losses by building and operating fish hatcheries.

What this country will be like fifty years from now will depend on how well we are able to practice self-control in the utilization of our natural resources. It is for this reason resource managers are playing a growing role in our society.

Results of Natural Resource Depletion. History is filled with grim reminders of the disregard of various societies for their natural resources. In several instances depletion of natural resources has brought about impoverishment, social decline, and decay of civilization.

Topsoil is said to be more precious than gold. Many early civilizations disregarded soil conservation. Their neglect resulted in erosion and flooding of rich valleys, clogged irrigation canals, depleted water supplies in dry seasons, unnavigable channels, and poor crop production.

In Mesopotamia, now Iraq, farming began 7,000 years ago. At the peak of Mesopotamian civilization, when Nebuchadnezzar built the Hanging Gardens of Babylon some 2,500 years ago, an estimated 17 to 25 million people lived there. The region was endowed with rich fields, but the climate was very dry. An intricate system of canals had been dug to bring water to the crops. As the population grew, these canals were extended farther and farther from the rivers, but erosion from the ever increasing farmlands was ignored. Silt choked the canals, and the crops died. The huge public works projects of clearing canals were interrupted from time to time by revolutions and invasions, so eventually there were not enough men to do the job. The people fled the land, victims not of human enemies, but of silt in water systems. Today the population of this once prosperous land is about one-fourth its former size, and the area is poor.

In our own country, the coal mines of Appalachia and the cotton lands of the South have been depleted; wet lands have been drained; buffalo lands have been plowed; and topsoil has been eroded. Many regional and local resources are destroyed by recurring floods and fires.

Ultimate Depletion of Natural Resources. As Unit 2 described, such resources as air, and water in its cycle, are generally considered inexhaustible. However, most natural resources in the United States and the world are subject to ultimate depletion.

Depletion by Population Expansion. It took all of recorded history up to the middle of the nineteenth century for the world's population to reach one billion. It took only the span of one lifetime to add the second billion. Today there are three billion people in the world, and according to the median estimate of the United Nations, there will be more than six billion within the next 35 years.

If present trends continue, the United States will have 9.5% of the world's population within 15 years. At that time this 9.5% will be consuming 83% of all the raw materials and resources produced by the entire world.

If we are to accommodate the anticipated population, we must build 200 miles of new highways a day, three complete elementary schools each week, and five million new homes in the next 15 years. This construction is equivalent to eight cities the size of San Francisco. Serving the needs of this population will place an unprecedented demand on living spaces, forest products, water, air, agriculture, minerals, oils and gas, energy, transportation, recreation facilities, fish and wildlife, and natural areas.

Water, iron, and copper are among the basic resources for a modern machine civilization. In a recent year Americans used approximately 118 trillion gallons of water, 132 million tons of iron, and 1.5 million tons of copper. Each additional person means an added drain of 600,000 gallons of water, 1,260 pounds of iron, and 15.5 pounds of copper a year.

Depletion of Water Resources. Fresh water is among the most serious needs of America, and the world. Scientists are working day and night to perfect methods of recycling used water and desalinization of salt and brackish waters for future needs, for it has become evident that we have overdrawn our water accounts in some areas.

Depletion from High Standard of Living. The drain on the nation's resources caused by the rapidly expanding population staggers the mind. Adequate amounts of certain materials are still available from abroad, but as the resources controlled by other countries become scarce, their export restrictions will tighten. We are a "have" nation that the "have not" nations view with wonder. They envy our high standard of living and decry our extravagant waste - the planned obsolescence, the status symbols, the changing styles in automobiles, electric appliances, and clothes. These are evidences of a country

rich in natural resources, but what will happen when the raw materials are gone?

Scientific Paradox. It is indeed paradoxical that scientific research and technology can provide methods for prudent management of natural resources, but can also create problems by increasing the demands on natural resources.

Technology in agriculture has increased the demands on natural resources. Today, cultivated crops are removing millions of tons of nitrogen from the soil annually. Natural processes return about one-half of that amount, and applied chemicals replace nearly one-third; the net result is an overdraft from the soil. This must be replaced by increasing the amount of synthetic fertilizers. When World War I cut off the importation of nitrates needed in the manufacturing of explosives, chemists discovered that free nitrogen taken from the air and mixed with oxygen and other compounds duplicated the natural nitrates. This process has been highly developed to produce nitrates for agricultural purposes.

Synthetic Materials. Scientific research and technology help to analyze many other problems relative to natural resources. Nearly all of our uranium, natural rubber, manganese, industrial diamonds, chrome, nickel, and tin used to come from outside the United States. Since World War II, the big challenge has been to develop methods of conserving supplies of these items and of developing substitute materials. Industry has made extensive use of relatively abundant resources such as air, water, sand, limestone, coal and petroleum products, natural gas, sulphur, salt, and wood; thus conserving scarce resources.

By studying the complex molecules in wood, silk, rubber, and cotton, chemists have produced plastics and synthetic fibers, which are not only satisfactory, but sometimes superior replacements for the original products. Rayon, a substitute for silk, was first produced in the early 1900's. After World War II, tremendous strides in the development of synthetics and plastics ballooned the production of these materials into a major industry, and chemical modifications in natural fibers enhanced their natural beauty and created greater serviceability.

Many people look upon synthetics as the solution to the problem of diminishing resources, but they are not, because all synthetics are made from the earth's natural resources. Furthermore, their manufacture creates enormous demands on water and power.

No area of the world, nor science itself, can be depended upon to replenish exhausted resources indefinitely.

Results of Scientific Advances. The achievements and the promise of science to substitute for, or to alter, natural resources for the needs and wants of the peoples of the world are notable and praiseworthy. Nevertheless, it is wishful thinking to rely on science to solve our resource problems before the resources are exhausted. The scientist does not share such naive optimism, for he knows that all materials used in science and technology come from the natural earth.

Future Possibilities. Science can discover means of effecting conservation. Opportunities for science to serve man in such a manner should be recognized and encouraged, for they compensate, in part, for the resource problems science creates. Science and technology should serve as handmaidens to society as a whole and over the long term. Their goals should be to improve man's way of life and, at the same time, to help manage natural resources and to supplement and replenish them whenever possible.

Man can try to atone for his mistakes. Ghost towns can be made into state parks; topsoil can be transported to mine tailings to make them habitable; time, fertilizers, and water may restore grasslands; water can be pumped into underground reservoirs that once contained petroleum. Obviously, however, such improvisation cannot continue indefinitely.

Effective conservation practices may extend the use of resources long enough to provide time for scientists to replenish some of the exhausted resources, but, in large measure, conservation should be viewed as those practices necessary to sustain a livable and useful world environment.

The problem of conservation cannot be solved by science or government alone. The philosophy of conservation will be manifested when each citizen approaches all problems concerning natural resources with this question: What method of handling this resource will bring the greatest benefits to the greatest number of people for the longest period of time?

STUDENT LEARNING ACTIVITIES

- Plan a speakers' program for resource people to discuss the major concepts presented in this unit.
- Use a hypothetical situation as a model to develop one program which will deplete the natural resources and a second which manages the resources. Compare the results of the two models.
- Participate for one or two days in the work of a local resource agency. Inquire of the agency management what its management concepts are.

TEACHER MANAGEMENT ACTIVITIES

- Collect and make available to students information on policies of natural resource agencies.
- Arrange for brief field experience for students with a local resources management agency.

RESOURCES

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Natural Resources In Our Economy, Stead Joint Council on Economic Education, 1969.

Future Environments of North America, P. Darling, Editor, Natural History Press, 1966.

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Unit 4 Governmental Resource Management Organization

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the major federal departments concerned with resources management.

2. Ability to describe the role of selected agencies in an area of resources management of interest to them.

CONTENT

Federal Agencies. Numerous federal departments are involved in the management of our natural resources: the Departments of Interior; Agriculture; Commerce; Housing and Urban Development; and Defense. Each of these departments includes various agencies concerned with specific aspects of natural resources management; only some of the more important are covered in this Unit.

Department of the Interior

The Department of the Interior is almost entirely devoted to the management of natural resources. Some of its more important Bureaus are listed below:

The Bureau of Land Management, established in 1946, is custodian for over 60% of the Nation's public lands, and administers over 470 million acres of federally-owned lands, mostly in the West, including approximately 149 million acres of forest and woodlands. This administration is conducted on the basis of multiple-use principles for such uses as grazing; fish and wildlife, recreation, timber, water, range, and wilderness protection; and mineral production.

The Bureau is also responsible for the development, conservation, and utilization of the natural resources and the mineral resources of certain acquired islands, and the submerged lands of the Outer Continental Shelf.

Public domain lands may be made available for lease or purchase for such environmental improvement purposes as public parks, sanitary land-fills, and rights-of-way for highways with extra width for scenic purposes. Technical and financial assistance (confined to agency-administered lands) may be applied to regional environmental problems in cooperation with local governments.

The National Park Service plans, develops, and administers the natural, historic, and recreation areas comprising the National Park System, and provides for preservation, interpretation, and enjoyment of other properties of scenic, natural, historic, and archeological significance.

Its Registry of Natural Landmarks and Registry of National Historic Landmarks provides for evaluation and recording of unique properties.

Through a Park Practice Program, it provides technical assistance to state and local agencies and citizen groups for planning, acquisition, development, and other technical services relating to park and recreation matters. The Service publishes periodicals on park practice and allied subjects.

The Bureau of Reclamation, a powerful force in the West since 1903, plans, constructs, and operates water storage, diversion, and development projects in Western States for domestic and industrial use. Its Reclamation Projects Program provides cost-sharing loans to reclamation districts and other public agencies for agricultural irrigation, hydro-electric power, municipal and industrial water supply, flood control, and recreation facilities. Financial assistance may also be provided to states, counties, or municipalities to develop recreation facilities in conjunction with Bureau projects.

The Bureau consults with state and local agencies on natural beauty aspects of project location and construction such as location of roads near sites; standards of water quality; tools and techniques available to test for, control, and abate pollution; and protection of fish and wildlife.

The U.S. Geological Survey (USGS), was established in 1879, and is the largest earth science research agency of the government. It conducts research to determine and appraise the mineral and mineral-fuel resources and geologic structure of the United States; enforces regulations concerning leasing, permits, and licensing of the same; conducts investigations to provide technical information required for economic development and best use of water resources; surveys flow and sediment discharge, reservoir contents, and location and safe yields of underground waters. The agency carries out surveys, mapping, and water resources investigations in cooperation with state

and local governments, financed on a 50-50 basis.

The Bureau of Mines is responsible for conservation, research, and development of mineral resources, and for promotion of health and safety in mineral industries. It studies air and water pollution related to mineral development and use, and develops model control regulations in cooperation with industry; its personnel also serve as advisors to local and state air groups. The Bureau makes grants for research in solid waste disposal.

Some subjects of recent Bureau study include: sulfur compounds in fuel coal and oil; control of dusts and fumes from metallurgical and chemical processes; acid mine drainage; control of pollution from back-filling strip mined areas; and disposal of solid wastes from open pit and underground mining operations.

The Bureau of Commercial Fisheries conducts research and other programs for conservation and management of commercially important fishing resources on the high seas, coastal and estuary areas, the Great Lakes and other interstate waters, and at water projects of federal agencies. It also provides grants, loans, and technical assistance.

The Bureau of Sport Fisheries and Wildlife manages fish and wildlife resources in conjunction with state agencies. It operates national wildlife refuges and national fish hatcheries, and has special responsibilities for migratory birds, and rare and endangered species. The Bureau administers grant programs (Federal Aid in Wildlife Restoration, and Federal Aid in Fish Restoration) providing funds for states to increase wildlife and fish populations.

The Federal Water Pollution Control Administration reviews water quality standards proposed by the states for interstate waters; carries out interstate enforcement actions; makes grants for construction of municipal waste treatment systems; carries out research and development programs; provides assistance for training fellowships and research; and makes river basin planning grants and program grants to state and interstate pollution control agencies.

The Bureau of Outdoor Recreation promotes coordination among federal plans and programs in this field, and identifies and plans actions needed to protect, develop, and improve the Nation's outdoor environment and recreation resources. The Bureau offers technical assistance to state and local government and private interests in planning, acquisition, and development of outdoor recreation resources.

The Land and Water Conservation Fund Grant Program provides financial assistance for planning, acquisition, and development of state and local public outdoor recreation areas in accord

with state outdoor recreation plans. The Fund also finances acquisition of recreation lands and waters by the Bureau of Sport Fisheries and Wildlife, the Forest Service, and the National Park Service.

Bureau publications include a periodical, *Outdoor Recreation Action*, and reports on such subjects as recreation trends, land price escalation, trails, and private and federal aids to recreation.

Department of Agriculture

The Forest Service manages the National Forests and Grasslands to ensure multiple-use and sustained yield of renewable natural resources. It conducts research in forest and other wild land management, forest fire prevention and control, forest insect and disease control, forest products utilization, forest land recreation, and forest economics.

Through its Cooperative Forestry Programs, the Forest Service provides technical and financial aid to state, local, and private forest landowners in cooperation with state agencies to encourage better fire, insect, and disease protection; better multiple-use management practices; increased tree planting for windbreaks, shelterbelts, and forests; and improved practices in harvesting, processing, and marketing forest products.

Department of Commerce

The Environmental Science Services Administration serves public agencies and the public in efforts to protect woodlands, ranges, waterways, and coastal areas against fire, flood, and storm. ESSA provides six categories of services: fire and agricultural weather, and data and forecasts concerning rivers and floods, the Continental Shelf, the environment, and air pollution.

The Air Pollution Service is developing methods to forecast those atmospheric conditions which favor hazardous pollution concentrations as a basis for control of industrial and other sources of pollution; and is conducting studies of the natural transport, dilution, and removal of air pollutants.

Department of Housing and Urban Development

The Land and Facilities Development Administration administers a number of public facility grant and loan programs in accord with local comprehensive plans of public agencies in urban areas.

The Program for Advance Acquisition of Land provides financial assistance to reserve land for future public works and facilities.

The Open Space Land Program shares costs of acquiring, developing, and preserving open space land for permanent public uses, including recreation, conservation, and natural beauty; it may also cover costs of buying developed land to be cleared and used for open space, and some costs of demolition and development of land acquired under the program.

The Public Works Planning Program offers financial interest-free advances for surveys and studies necessary to public works projects such as sanitation and water facilities, roads and streets, parks and recreation facilities, and non-federal river and harbor improvements.

The Sewer and Water Facilities Program shares costs of construction of these facilities.

The Renewal Assistance Administration administers and coordinates urban improvement programs in developed areas.

Its Code Enforcement Program offers financial assistance for local planning and administration of programs to arrest deterioration and aid restoration of both properties and environments.

The Community Renewal Program provides financial assistance in preparing, completing, or revising renewal programs, including costs of studies.

The Demolition Grant Program helps pay for demolition of legally unsound structures in or out of urban renewal areas.

The Urban Beautification Program makes grants for local beautification and improvement work, such as development of parks; upgrading of public areas, such as malls and waterfronts; and for provisions of "street furniture" and planting.

The Urban Planning Assistance grants supplemental state and local funds for a wide range of comprehensive planning activities ranging from producing a workable plan for community improvement to studying regional transportation needs.

The Urban Renewal Program helps communities in acquiring and clearing land for redevelopment, rehabilitation of existing structures, enforcement of housing codes, and combinations of these. Grants, planning advances, and temporary loans and guarantees are available.

The Urban Renewal Demonstration Program helps pay costs of

projects which demonstrate, develop, or test new or improved methods of preventing or eliminating urban blight.

Department of Defense

The Department's military installations encompass about 27.6 million acres on American territory. Individual installations constitute planned communities equivalent to comparable sized cities and towns. Professionals trained in applicable sciences (such as agronomy, biology, entomology, forestry, landscape architecture, master planning, and sanitary engineering) administer various programs relating to soil and water conservation, dust control, pest control, sound abatement, landscape design, "pride of ownership" programs among housing occupants, forest management, fish and wildlife conservation, recreational uses of land, and air and water pollution abatement.

The Corps of Engineers, Department of the Army, conducts a Civil Works Program to construct multiple-purpose water resource development projects. Its Water Resources Development Program provides financial assistance for multi-purpose dams, canals, and dredging projects. Individuals or organizations may request a survey of project needs through members of the U.S. Senate or House of Representatives.

The Corps is authorized to construct, maintain, and operate public park and recreational facilities at its project areas, and to permit local interests to do so. The Corps constructs beach erosion control projects in park and recreation areas owned by non-federal agencies, and develops small boat refuge harbors for recreational craft.

Efforts are made during all construction to preserve fish and wildlife; woodlands; historic, archaeological, and scenic resources; and to restore landscape features disturbed during construction. Hearings are held during project planning stages to permit expression of public views.

STUDENT LEARNING ACTIVITIES

- Locate on a map federal land, and identify the Department or Agency which is responsible for its management.
- Discuss with members of local, county, or state resources management groups their relationship with the federal agencies identified in this unit.
- Visit a resource management organization site or project. Examples include Corps of Engineers projects, national forests, wildlife refuges, recycling center, or water treatment plants.

TEACHER MANAGEMENT ACTIVITIES

- Subscribe to and display various publications of the Forestry Service, Bureau of Land Management, National Park Service, etc., which show their role in resources management.

- Arrange for a speaker from the Forestry Service, EPA, or other federal agency to discuss with students their organization's role in resources management.

- Arrange for a field trip to visit a resource management agency, organization, or project.

- Discuss with students such questions as:

  What services should federal and state resource management agencies provide?

  What kind of resources management services do you foresee for the future?

RESOURCES

Our Living Land, U.S. Department of the Interior, Government Printing Office, 1971.

Environment and Change: The Next Fifty Years; and Environment and Policy: The Next Fifty Years, Indiana University Press, 1967.

The Quiet Crisis, Stewart L. Udall, Avon Publishers, 1963.

Environmental Overheads, Hammond-Newsweek, Visual Study Series, Hammond, Incorporated, Educational Division, 1970.

Natural Resources for U.S. Growth: A Look Ahead to the Year 2000, Hans H. Lansberg, John Hopkins Press, 1964.

Unit 5 Career Lattices and Mobility

INSTRUCTIONAL OBJECTIVES

1. Ability to identify and describe preprofessional entry level jobs and basic qualifications for at least three of the major job families in resources management.

2. Ability to construct a typical "career lattice" for at least three of the major job families in resources management.

CONTENT

Entry Level Jobs. A career lattice is a series of jobs of gradually increasing difficulty. Entry level jobs are those jobs usually found on the first step of the lattice. They usually require minimal skill and education. Examples of entry level jobs in resources management are:

Parks - park attendant
Forests - forest aide or fire lookout
Pollution Control - waste water plant attendant

Typical Career Lattices. The career lattices for several job families in resource management are not readily identifiable. In job families such as Conservation, or Fish and Game, promotional patterns are usually accomplished through a series of in-grade salary increases.

In general, the way up for a person in the Park job family consists of a series of preprofessional positions. For example, a person may start as a laborer, which in turn may lead to gardener, then to gardener-foreman. The position of supervisor is typically the ultimate step and usually requires many years of experience, together with education beyond high school.

Another career lattice, particularly at the local governmental level, is to become a grounds keeper, and later a gardener. Some local governments, particularly cities, have specialized positions (such as greenskeeper, or tree trimmer) open to those with experience as a groundsman.

Career lattices in forestry work vary with the agencies. A worker in the U.S. Forest Service for example, may qualify as District Ranger, Staff Specialist, or perhaps Forest Supervisor in a National Forest, and may go on to a position in a regional or national office. In a federal research agency, the forester may advance to Research Forester specializing in forest management or silviculture. The top jobs in forestry work are usually held by people experienced both as rangers and as foresters.

Most of the government service positions in agriculture and pollution control are at a professional level on the career lattice, and require at least a college degree. In most instances these positions require specialization in a specific field of study, as well as a master's degree.

STUDENT LEARNING ACTIVITIES

- List and describe preprofessional entry level jobs and basic hiring requirements found in three of the major job families within resources management.
- Construct a typical career lattice for a major occupational group of your choice.
- Discuss with a resources management worker typical entry level jobs for which high school graduates are hired.
- Read pamphlets listed under Resources.

TEACHER MANAGEMENT ACTIVITIES

- Organize students into small groups by job family interest area to discuss typical activities of entry level jobs in resources management.
- Arrange for a speaker from a local, state, or federal resources management organization, or the U.S. Civil Service Commission, to address the class. Ask him to stress past and future employment opportunities, basic hiring requirements, and typical career lattices in resources management.
- Discuss with students the resources management occupational group stressing its major components.
- Discuss with class questions similar to these:

  What kind of career opportunities do you think exist locally in resources management?

Can you name any local or state organizations concerned with resources management?

What kind of job could you get in resources management as a high school graduate?

RESOURCES

Where The Action Is...A Career In Park, Recreation, and Conservation, National Recreation and Park Association, 1971.

Opportunities In Resource Management, Bureau of Land Management, U.S. Department of The Interior, 1971.

Unit 6 Manpower Needs in the 1970's

INSTRUCTIONAL OBJECTIVES

1. Ability to identify, locate, and use at least three sources of information and statistics concerned with manpower requirements in resources management.

2. Ability to identify and describe present and emergent jobs found in resources management.

CONTENT

Tomorrow's Jobs. We can be certain, as we look ahead at tomorrow's jobs in resources management, that there will be change. There will be more people working in this area and they will have a higher level of education and training. The nature of resources management is changing. Many new occupations are emerging. However, despite the certainty of change, only a small percentage of students presently in school will enter those occupations which are drastically changing in content. The overwhelming majority of students who enter resources management will find that the occupation will not change too much in the next ten years.

The U.S. Department of Labor recently made projections of growth for several of the job families in resources management. It showed that, in general, the employment growth will be fastest among those occupations requiring the most education and training to enter. Employment in professional and technical occupations will show the most rapid growth - about twice as fast as preprofessional employment. These occupations usually require the most formal educational preparation. Within resources management at the federal level, the largest increase in employment will be in professional positions.

How Jobs Occur. Before looking at employment opportunities in resources management, let us consider how job openings occur.

They stem from two sources: growth in the number of people employed in a major occupational group, and replacement needs. In resources management, the need to replace workers who leave their jobs because of death, retirement, or other reasons will be the principal source of new workers. Thus, there are frequently many openings each year in job families even when that job family is not growing or is even decreasing in size. Replacement needs are high in fish and game, agriculture, and conservation job families. In rapidly growing job families, such as parks or pollution control, expansions of the job family and creation of new jobs will be causes of increased employment.

Sources of Employment Information and Statistics. Most states and several federal agencies have information and/or statistics concerning careers in resources development. The U.S. Department of Agriculture, U.S. Department of Commerce, U.S. Department of the Interior, and the U.S. Environmental Protection Agency - all these produce pamphlets and fact sheets about such careers. Professional associations such as the American Forestry Association and the National Recreation and Parks Association also issue data concerning careers in resources management.

STUDENT LEARNING ACTIVITIES

- Explain to the local librarian your interest in resources management and ask him to recommend a text on career guidance.
- Write to the U.S. Civil Service Commission or your state employment service, and request brochures or occupational guides covering careers in resources management.
- Read those sections in the *Occupational Outlook Handbook* which describes careers in agriculture, parks, conservation,and forests.
- Collect and discuss information from newspapers and magazines dealing with resource management jobs and careers.
- Analyze own qualifications and compare with recommended qualifications for resources management worker.

TEACHER MANAGEMENT ACTIVITIES

- Arrange class in small groups to discuss present and emergent jobs in resources management.
- Provide students with addresses of resources management organizations to which they can write for career information.

- Set up display of pictures, booklets, and pamphlets depicting occupations in resources management.

- Encourage students to set up and maintain a file of clippings on changing employment patterns in resources management.

RESOURCES

Occupations and Careers, S. Norman Feingold and Sol Swerdloff, McGraw-Hill Book Company, 1969.

Working Toward a Better Environment--Some Career Choices, Environmental Protection Agency, 1971.

Manpower for Environmental Protection, *Environmental Science and Technology*, Vol. 5, No. 4, April, 1971.

So You Want to Be a Forester, Charles Edgar Randall, American Forestry Association, 1971.

Section 5

RURAL, URBAN, AND COMMUNITY DEVELOPMENT

Here are the contents of Section 5 of the Orientation Curriculum Guide.
We suggest you read it before you read the text.

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Section 5

RURAL, URBAN, AND COMMUNITY DEVELOPMENT

Unit 1 Nature of the Field

INSTRUCTIONAL OBJECTIVES

1. Ability to identify four major problems in the field of rural, urban, and community development, and to discuss their implications.

2. Ability to identify the major job families in rural, urban, and community development.

CONTENT

Introduction. Planned rural, urban, and community development is now an important function at all levels of government. The problems of our rapid growth in the United States have spilled across local boundaries. As a result, there is an interrelationship and interdependence among our rural, suburban, and metropolitan areas. Presently, the suburbs depend in large measure upon the metropolitan areas for culture, employment, entertainment, and hospital care. At the same time, suburbs provide residential areas, schools, and shops for the more affluent residents. The metropolitan areas are becoming burdened with the poor resident as well as with the rapidly increasing tax burden needed to provide increased municipal services in waste disposal, police protection, mass transit, and related areas. Coupled with this transformation, the metropolitan areas are faced with an increasingly smaller tax base upon which to levy taxes. In addition, the rapidly developing suburbs are consuming vast quantities of land and creating serious problems in waste disposal, commuter transportation, education, water supply, and related areas.

To aid in relieving these problems, and to solve even more acute problems that may well develop, there is a critical need for professional and paraprofessional personnel in the area of rural, urban, and community development. These urgent and complex problems, emerging from our present day social, physical, and economic changes, require carefully trained personnel in

community action, planning, building and zoning, and land acquisition.

Major Job Families. There are four major job families within rural, urban, and community development: community action, planning, building and zoning, and acquisition.

These four job families are primarily concerned with developing individual skills and knowledge, as well as performance of duties in support of professional planners who are employed by governmental agencies, county and city planning organizations, various state governments, the federal government, and by private consulting firms.

The four major job families are concerned with the development of skills and knowledge in such areas as chart and map preparation; land use studies; preparation of community relations material; planning of water, sewer line, street, and highway layouts; as well as the proper location of such major municipal facilities as schools and playgrounds. Persons employed in rural, urban, or community development are expected to develop skills and knowledge as they relate to one of the four major job families.

STUDENT LEARNING ACTIVITIES

- Describe the field of rural, urban, and community development, and explain why it is so important at the present time.
- Develop a chart showing how employment in the occupations of this field has increased during the past ten years.
- Develop a list of activities performed in the areas of rural, urban, and community development.

TEACHER MANAGEMENT ACTIVITIES

- Compile a file of instructional resources for students.
- Assign students to form four groups and discuss the four major job families.
- Invite a representative from the State Employment Service to make a presentation to the class on employment needs in this work.
- Invite an urban planner or a member of the Regional Planning Board to make a presentation to the class on the opportunities in the areas of this development.

RESOURCES

Dictionary of Occupational Titles, U.S. Department of Labor, U.S. Government Printing Office, 1965.

Occupational Outlook Handbook, Bureau of Labor Statistics, U.S. Department of Labor, Bulletin 1650, 1970-71 edition.

Planning for Development in New York State, New York State Office of Planning Coordination, National Clearinghouse for Federal Scientific and Technical Information, 1971.

All of the People All of the Time, Modern Talking Picture Service, (Film, 28 min., color, free loan), 1966.

Unit 2 Basic Concepts of Rural, Urban, and Community Development

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the eight facets of community action, and describe the function of each.

2. Ability to identify the need for rural, urban, and community planning in everyday life.

3. Ability to discuss the major issues as they relate to building and zoning problems.

4. Ability to identify the problem involved in the acquisition of land intended for governments and related uses.

CONTENT

Community Action. In the past two decades, people have been getting more involved in the problems of their community, and have formed community action groups to bring about desired changes and improvements. The activities of these groups have been responsible for bringing about many civic projects and improvements. The scope of community action (including the components of: community topology, structure, system, theory, analysis of problems, change, and development) has been broadened to include problems, improvement, welfare, and development of the community. Community action has become an important tool of the people by increases in strength and bargaining power through the united action of people in the community.

The field of community action, as related to rural, urban, and community development is an increasingly important one. With an increase in the number and kind of problems facing communities and an increase in the overall number of communities, there will continue to be an increased demand for qualified personnel in this area.

Planning. It is evident that as our population increases, so do our problems. The need for more schools, homes, and hospitals, as well as increased traffic problems, pollution, and other concerns related to a growing population, make rural, urban, and community planning imperative. Planning decisions affect the lives of all of us. Therefore, it is important that the individuals concerned with this development have a broad understanding of what is actually involved in planning: including inventory and analysis, determination of goals and objectives, plan development, and implementation phase.

Planning is an extremely important function of rural, urban, and community development, and must be continuously pursued in order that we will have a better world in which to live.

Zoning and Building. Zoning is one method of enforcing the elements of a plan in rural, urban, and community development. Another method, of course, is a Building Code that will direct and control the types and kinds of buildings that will be built in specified areas. Both zoning ordinances and building codes are based upon police power.

Zoning. Through the division of the area into districts in which certain uses of land are permitted or prohibited, zoning serves as a guide for the development of the community. Zoning may prohibit the introduction of an industrial use into a residential area or it may prohibit the building of residences in an industrial area. The presumed purpose of zoning activities is not to remodel a community, but to provide protection for existing developments and some control for future growth.

Zoning is most effective when done in connection with a comprehensive planning program. Good zoning requires extensive basic surveys, mapping, and studies to prepare a master plan, and there is little economy or value in trying to do the zoning job alone, without the planning function.

A zoning ordinance based on (and supported by) a comprehensive plan for the community is on a firmer foundation than one for an unplanned community.

Good zoning would include these components: legal authority, zoning agencies, application of zoning ordinances, data needed for zoning ordinances, zoning ordinance preparation, zoning ordinance enactment, changes in zoning ordinances and maps, and the establishment of a Board of Appeals.

These components can be broken down into the following topics: legal authority; organization of zoning agencies; application of zoning; data needed prior to zoning ordinance preparation; preparation of zoning ordinances; enactment of ordinances;

changes in zoning ordinances and maps; enforcement of zoning ordinances; and the role of the Board of Appeals in granting or denying variances.

Building. As in the case of other codes, administration, enforcement, and adoption of the Building Code are matters of local determination and control, although normally based upon, with local modifications, the Universal Building Code, which has been nationally adopted. Officials responsible for the enforcement and administration of the Building Code should be knowledgable of federal, state, and local laws, and other regulatory measures to the building codes.

Acquisition. Acquiring adequate land for building utilization, recreation, transportation, and utilities, to meet the needs of tomorrow's population, presents a major challenge to all city and county officials. This challenge will not diminish. The amount of land available for all uses is essentially fixed, but demands for it continue to increase. As our population expands, so does the need to use the same tract of land for competing purposes.

At the present time, land is being consumed at a very rapid rate for many different purposes. Inasmuch as there is not enough suitable land ideally located to satisfy the demand, land costs are rising rapidly. This presents a serious problem to elected officials who must acquire property for community needs.

Before public officials embark upon a massive land acquisition program, a clearly defined policy should be established. A policy statement sets forth the goal of each acquisition program, and indicates methods public officials may use to achieve that goal.

Methods of Acquisition. Land is obtained in a variety of ways; the resourceful public official will explore the possibility of using all of them. Some of these ways are: full title negotiation; installment buying; tax delinquent land; advance acquisition; eminent domain; and donation.

The field of land acquisition as it relates to rural, urban, and community development is an increasingly growing one. As the demand for land increases, employment opportunities in this field will also increase.

STUDENT LEARNING ACTIVITIES

- Define or discuss in a sentence or two the following terms in relation to community action; community topology, structure, system, analysis, theory, problems, change and development.

- List problems of your community which have been solved through the action of community groups.
- Visit areas of various communities and report on problems that you have seen which could be solved by community action.
- Interview people in various communities as to the most pressing problems of the area and the action being taken to alleviate the problems.
- Interview people in various communities for their opinion of community action and involvement in the solving of community problems.
- Conduct a survey as to the relationship between town or city officials and community action groups.
- Discuss the steps involved from the realization of a problem, to the presentation and solution of the problem.
- Do a research paper on a problem in your community which was solved through community action. List the steps involved from first action to the solution of the problem. Specify time involved.
- Write a paper on the employment opportunities in community action work.
- Identify a planning problem in a specific locality by use of the newspapers or a field trip.
- List the advantages and disadvantages of an occupation in planning.
- Discuss the relationship of planning to the other three job families of rural, urban, and community development: community action, building and zoning, and acquisition.
- List three objectives of zoning ordinances.
- Name five building and zoning ordinances employed in your area.
- List the procedures that are followed to enforce building codes and zoning ordinances in your locality.
- Visit the local town or city hall and examine the building codes and zoning ordinances in effect in your community.
- Discuss steps involved in the acquisition of surplus government property for open space and recreation.

- Define the following terms as they relate to land acquisition: full title negotiation, installment buying, tax delinquent lands, advance acquisition, and eminent domain.
- Describe the field of land acquisition and what things must be considered when acquiring property.
- Discuss acquisition costs and amounts of money available for acquiring lands for public use.
- Visit various recreation areas and discuss their advantages and deficiencies.
- Make a list of recreation spaces in your local area.
- Conduct a survey in your neighborhood to find out how well recreation land is used and located.
- Do a short report on the need for acquiring land for recreation areas.
- Write a summary of problems to be considered when establishing a land acquisition policy.

TEACHER MANAGEMENT ACTIVITIES

- Arrange visits to various communities to see the problems first hand and attend meetings of the community action groups in those communities.
- Provide guidance to the students with their reading assignments and research papers.
- Provide the students with various materials on community action such as magazines, books, pamphlets, and newspaper clippings.
- Ask students to discuss planning problems which they have identified from the local newspaper.
- Arrange for a visit to the local planning office to view the procedures used in the planning process.
- Arrange for a field trip through the local community to identify visible existing problems.
- Prepare a file of current zoning maps for student use.
- Prepare and order a list of films for students to view pertaining to related areas of planning.
- Subscribe to magazines and publications pertaining to local government and planning, and to recreational facilities.

- Invite guest speakers to give lectures or lead discussions on various aspects of planning.
- Arrange for students to visit the local town hall to find out how applications for zoning are submitted and approved.
- Have students make charts of zoned areas in the community in which they live and identify the type of zoning for each area.
- Have students find out why zoning ordinances and building codes are so important.
- Have each student prepare a map of a specific land area showing open space and recreational facility deficiencies that can be corrected through acquisition of land.
- Have students form groups and discuss advantages and disadvantages of recreation areas in the local community.
- Arrange for visits to various local recreation areas and land areas that could be used for recreation through acquisition by local public authorities.
- Provide guidance by showing students how to construct graphs and reports showing the ratio between recreation land acreage and population.
- Have students discuss different types of recreation areas, and the purposes that they serve.
- Arrange visits to the local planning office for explanations of proposed recreational areas and the problems that arise during the acquisition of such property.

RESOURCES

Community Structure and Analysis, Marvin B. Sussman, Crowell, 1959.

Community in Action, Severyn Bruyn, College and University Press, 1963.

Working with People in Community Action, Clarence King, Association Press, 1965.

The Human Factor in Community Work, T.R. Batten, Oxford University Press, 1965.

Community Development, National Training Laboratories, 1961.

Rural Development Planning, Earl M. Kulp, Praeger, 1970.

Urban Land Use Planning, F. Stuart Chapin, Jr., Harper and Brothers, 1957, and Board of Trustees of University of Illinois, 1965.

Planning Functional School Buildings, M. R. Sumption and J. L. Landes, Harper and Brothers, 1967.

The Urban General Plan, T. J. Kent, Jr., Chandler Publishing Co., 1964.

Community Building Science Technique, Art, Doubleday and Co., 1956.

Rebuilding Cities, Percy Johnson-Marshall, Aldine Publishing Co., 1966.

The Place of the Ideal-Community Urban Planning, Thomas A. Reiner, Trustees of the University of Pennsylvania, 1963.

Site Planning, Kevin Lynch, Massachusetts Institute of Technology, 1962.

Legal Aspects of Planned Unit Residential Development, Urban Land Institute, 1965.

Capital Requirements for Urban Development and Renewal, John W. Dyckman and Reginald R. Isaccs, McGraw-Hill, 1961.

Town Design, Frederich Gibberd, F. A. Praeger Inc., 1959.

New Towns - Answer to Urban Sprawl? The U. S. News and World Report, February 14, 1966.

Busy Remodeler of the World, Life, October 7, 1966.

Land to Live In, Orville L. Freeman, Current, October, 1969.

Scratch a City Planner, American City, May, 1966.

Making Cities Better Places to Live, Business Week, August 22, 1970.

Urban Process: Planning With and For the Community, Architectural Record, May, 1969.

Study and Research - New Concept and Techniques, Architectural Record, March, 1970.

Local Planning and Zoning, New York Office of Planning Coordination, 1970.

Unit 3 Functions and Duties of Workers

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the responsibilities and duties of workers in each of the four job families in rural, urban, and community development.

2. Ability to make a comparison of the duties required of workers in each of the four different job families in rural, urban, and community development.

CONTENT

Background. Until the 1960's, much of the governmental activity in the field of community development was concentrated in rural areas. Today, however, the majority of Americans live in urban areas, and the problems of the cities have become our most crucial domestic issue. Poverty, racial strife, congestion, pollution, inadequate housing,and other ills cry out for solutions. Americans who have not had a fair share in the general prosperity are demanding jobs, housing, education, and other services they have lacked, as well as the power to influence the decisions of government. The need for new solutions has never been greater, and much of society is looking to specialists in rural, urban, and community development to invent the means to a better future.

It is estimated that, for the next decade, there will be primary emphasis on the physical growth and development of cities. The guidelines for a city's future physical development are often expressed through a "comprehensive plan." Such a plan, typically, shows the proposed uses of the land (residential, commercial, and industrial areas; open space, recreation, etc.) as well as the distribution of public facilities, such as roads, rapid transit, schools, and parks.

Today, many comprehensive plans emphasize more the process of constant change and broad policies, rather than the narrower

questions of size and location of specific facilities. Social and economic ramifications of the policies and alternatives are often mentioned.

A major reason for the growth of rural, urban, and community development is that the interconnected nature of various facets, physical, social and economic, is becoming an increasingly potent force in American life. For instance, the construction of an expressway between the center of a city and a suburban area may not merely offer better mobility to one group of citizens; but it may also destroy an existing community, create a slum in another section of the city into which the displaced persons will crowd, cause a marsh to silt up and thus deprive wildfowl of their breeding grounds, and perhaps bring about several other unintended events that may cause harm to one group or another, sooner or later. The public service workers must try to foresee both the beneficial and the harmful consequences, to weigh them against one another, and to recommend actions that will optimize the benefits and minimize the harm.

General Duties. Rural or urban development usually proceeds in specific steps: analysis of problems; identification of goals (general) and objectives (more specific); design of alternative programs to reach the objectives; evaluation of the alternatives; making of recommendations to those who must be responsible for the final decisions; and monitoring of the effectiveness of programs once they are being carried out.

In practice, these steps are not sharply separated, and often several of them go on simultaneously. Each step has its own requirements and tools which are appropriate to it. For example, in the analysis of problems it is usually desirable to get accurate and up-to-date statistical information concerning those who are actually suffering under a certain condition (say from deficient housing).

The formulation of the problem is also important: the approach to a solution may be quite different if one thinks of the poor housing being related to a particular geographic area in the city, rather than to a particular group that shares some ethnic or economic factor (such as being black, or with a median family income below, say, $3,000 per year).

Workers in rural, urban, and community development do not automatically know the desires or needs of the people. In setting goals and objectives, planners are involving, more and more, the people whom the actions will affect. Surveys, public hearings, and other means are used to insure that the worker is not merely assuming that his own values are those of the public.

Specialty Job Families. Many individuals concerned with rural, urban, and community development specialize in one specific field within a major job family. Some of these fields include:

Urban Renewal. Specialists in urban renewal have to be familiar with the complex federal legislation and procedures which have, over the past 20 years, done much to reshape the downtown areas of many American cities. Some of the key considerations in urban renewal planning are: relocation of present residents and businesses; rehabilitation of old, but structurally sound, buildings; demolition of unsound structures; and replacement of demolished structures with new construction, schools, and other needed neighborhood facilities. Today, neighborhood and citizen groups often have a considerable involvement in planning for the future of their area of the city.

Design. This specialty combines techniques from architecture and landscape architecture with planning principles. Experts in urban design often work on large-scale development projects, such as complexes of public buildings, open space, and transportation facilities.

Economic Resources Development. Workers in these areas aim primarily at economic objectives; improving levels of employment, or increasing industrial growth in an area, for example. In resource development planning, the economic aims are combined with high attention to conservation of natural resources.

Administration. These positions are usually senior ones held by experienced persons. Responsibility involves the legal aspects of rural, urban, and community development; contact with legislative bodies; hiring and training; budgeting; and the coordination of public and private activities.

Other workers are involved in program evaluation, to determine how well programs meet their stated objectives. Others are concerned with design and administration of housing codes, zoning ordinances, and passage of laws.

Salaries. The salaries of rural, urban, and community development workers vary with the type of duties they are assigned, as well as with the geographical locations of their jobs. The average salary at the entry level for a paraprofessional varies considerably. Some salaries range from a minimum of $4,500 annually to $8,000 annually. The average beginning salary for a beginning professional is $8,600 per year, while the top salary is $28,000, or more, per year.

STUDENT LEARNING ACTIVITIES

- Divide the class into four groups and discuss the goals of the four major job families in this field.
- Develop a list of occupations with responsibilities and duties in each of the four major job families.
- Identify those duties which are performed in each of the four major job families.
- Interview a worker, such as a local building inspector or zoning enforcement officer, and make a list of his specific responsibilities and duties.
- Visit the local townhall and observe what takes place when a building permit application is submitted and processed.
- Prepare a research report on the working conditions of workers in one of the four major job families in rural, urban, and community development, and make a report to the class.

TEACHER MANAGEMENT ACTIVITIES

- Arrange for the students to visit a local planning office and hear a presentation from the official in charge.
- Discuss with students the reasons why rural, urban, and community development is becoming more complex and more important.
- Discuss with the students the goals of workers in the job families of community action, planning, building and zoning, and acquisition.
- Discuss with the students the responsibilities and duties of workers in the same job families.
- Discuss with the students the duties common to all job families in this field.

RESOURCES

Innovative Zoning, Legal Memorandum, New York State Office of Planning Services, 1971.

Interim-Stop Gap Zoning, New York State Office of Planning Services, 1969.

People and Plans, Herbert J. Gans, Basic Books, 1968.

Cities In A Race With Time, Jeanne R. Lowe, Random House, 1967.

The City Planning Process: A Political Analysis, Alan A. Altshuler, Cornell University Press, 1965.

Unit 4 Recommended Qualifications of Workers

INSTRUCTIONAL OBJECTIVES

1. Familiarity with, and ability to discuss, the typical job entry qualification, such as age, education, and background experiences for the rural, urban, and community development worker.

2. Ability to evaluate his own qualifications and compare them with the recommended qualifications required for entry level jobs.

CONTENT

Age Level. As with most jobs, the basic entry age of workers in rural, urban, and community development varies greatly. In some cases it is possible to start work at age 16 as a surveyor's rod man, drafting tracer, or storekeeper. However, most people typically start at age 18 to 25 and continue working until retirement age. The usual working age range is 18 to 60.

Education. Preprofessionals at the basic job entry level have, typically, had some experiences in high school related to the job area they desire to enter, and most hold a high school diploma. Others possess a college education, which is usually required for entry at the professional level. However, many jobs such as building inspector, building manager, and senior draftsman are gained by years of experience on the job, and not necessarily by formal schooling. Most entry level older workers hold (at the very least), or are working toward, a G.E.D. certificate.

Job Entry. Approximately 9 out of 10 jobs in the federal government are covered by the Civil Service Act, which provides that competitive examinations must be taken to obtain these jobs. Persons who score the highest on the exams receive first

preference in hiring, although other factors, such as veteran's status, may have a bearing also. Some jobs may not be covered by this requirement. Applicants must meet minimum age, training, and experience requirements for the particular job they desire.

Most state and local government positions are also filled by some form of civil service test, and personnel are hired and promoted on the basis of merit. Specific information on jobs available can be obtained at the State Employment office, or through the state or local Civil Service Commission. Keep in mind that there are often exceptions to the above qualifying requirements in some areas.

The needed entrance qualifications or programs to further the upward job mobility can be gained in high school, technical institutes, junior and community colleges, extension divisions of colleges and universities, and through correspondence schools. Other persons qualify for various career jobs or advance upward in their careers through on-the-job training programs, combined with part-time schooling or apprenticeship programs. Important qualifications for success are a sincere interest in one's work, and the ability to get along with others in the community.

Community Action. Entry level jobs at the preprofessional level usually require a high school education or its equivalent. Preprofessionals qualify with drafting, or clerical knowledge, or some form of community involvement activities or knowledge. At the professional level, a masters' degree is desired, with undergraduate work in city planning, architecture, engineering, or public administration.

Planning. Entry level jobs in planning typically call for experience or familiarity with the field of drafting. This applies also to the closely related areas of illustrating, and modelmaking. Some ability to visualize objects in three dimensions, and skill in freehand sketching is needed. At the professional level, a masters' degree in planning is most desirable. Planners must frequently pass civil service examinations for appointment.

Building and Zoning. Entry level jobs in building and zoning usually require a high school education or its equivalent, with some training in drafting or its related fields. Inasmuch as workers are expected to prepare and use maps, and to prepare and use building and zoning codes, additional on-the-job training or education may also be desired. At the professional level, five years or so of experience in housing, construction,

architecture, or engineering is needed, or three or more years of college.

Acquisition. Job entry requirements vary in this area from minimal amounts of drafting, mechanics, or surveying gained in high school or its equivalent, to first or second level professional college degrees in housing administration, architecture, or surveying. Occupations involve assessments, establishing boundaries, protection of public properties and equipment, mapping, and community involvement.

STUDENT LEARNING ACTIVITIES

- Study and discuss material on age, education, background, experience, and training, and recommended qualifications for workers in this field.
- Analyze self interest and experiences, and compare these qualifications with the recommended qualifications for workers in this field.
- Develop a short comparative report on the analysis and comparison of your own qualifications with the recommended qualifications for workers in this area.
- Develop a list of further education or training experiences needed to qualify for a job at a higher entry level.
- Develop a list of experiences and/or types of training that would enable the student to make the most rapid progress on the job.
- Select one or more specific entry level jobs in which the student is interested, determine the local entry qualifications, salary, and working conditions,and/or duties.
- Visit the local civil service commission office and make a listing of jobs currently available, entry qualifications, salary, and working conditions and/or duties.
- Develop a list of all career jobs for which the student is presently qualified, and compare the similarities and differences between these entry level jobs.

TEACHER MANAGEMENT ACTIVITIES

- Arrange for a visit to the local state employment office.
- Prepare a bulletin board display comparing various qualifications for entry level jobs such as age, education, training, and other experience.
- Provide opportunity for group discussion and analysis of

student's own qualifications with recommended entry level qualifications for workers in this group of services.

- Provide a report or conduct a class discussion on the experiences of previous students who have entered this career area from this school.
- Arrange for a class field trip to the local Civil Service Commission office.
- Conduct a discussion on the various types of examinations required for many government entry jobs.
- Conduct a discussion on the similarity of qualifications for a specific entry level job in various parts of the country, and the resultant mobility available to workers.
- Discuss the mobility available between various entry level jobs, or between career families.

RESOURCES

The Challenge of Urban Planning, American Institute of Planners, 1970.

Employment Outlook for Urban Planners, Department of Labor, U.S. Government Printing Office, 1970.

Careers for Women: Why Not Be An Urban Planner? Department of Labor, U.S. Government Printing Office, 1971.

Urban Planner, Chronicle Guidance Publications, 1970.

Careers in Public Planning and Administration, Angelo Cohn, Henry Z. Walck, Inc., 1967.

Career Opportunities: Community Service and Related Specialists, J. G. Ferguson Publishing Co., 1970.

Unusual Careers, Martha E. Munzer, Alfred A. Knopf, Inc., 1970.

The City As a Community, Washington Square Press, 1970.

Planning Our Town, Martha E. Munzer, Alfred A. Knopf, Inc., 1964.

Cities Are People, S. Carl Hirsch, Viking Press, Inc., 1968.

Our Working World: Cities At Work, Lawrence Senesh, Science Research Associates, 1966.

Unit 5 Career Lattices and Job Mobility

INSTRUCTIONAL OBJECTIVES

1. Ability to identify preprofessional entry level jobs in the community action, planning, building and zoning, and acquisition job families.

2. Ability to construct a typical career lattice for elements within the community action, planning, building and zoning, and acquisition job families.

3. Ability to describe typical entry level jobs for preprofessional workers in the field of rural, urban, and community development.

CONTENT

Entry Level Jobs. A career ladder is a series of positions of gradually increasing difficulty. The first step on the ladder is usually referred to as "entry level." Entry level jobs require minimal skill and education, and are usually open to workers without prior experience in that job. Examples of entry level jobs in rural, urban, and community development are:

Community Action -	Community Program Aide Urban Renewal Aide Storekeeping Clerk
Planning -	Planning Aide Messenger Modelmaker Junior Architect
Building/Zoning -	Building Inspector Trainee Engineering Aide

Aides or paraprofessionals in community action assist in the preparation of education and planning programs, and in clerical

and housekeeping duties. Aides in planning assist in mapping, drafting, designing, engrossing, and modelmaking; and in building and zoning, they participate in housekeeping, caretaking, and maintaining records.

Typical Career Lattices. Clearly identifiable career lattices in the major job families in the rural, urban, and community development areas are shown in Figures 9 through 13. These are based on large organization or systems, although the number of positions might be reduced in smaller organizations. While the career lattices emphasize preprofessional jobs, they also include professional positions. Specific job titles and duties to be performed will vary somewhat with the type of organization and its purposes and goals.

The career lattices illustrate the presence of the opportunities for upward mobility in the major job families. Implicit in the upward mobility is the difference between "careers" and "jobs." Job training connotes training for a position which may or may not have permanence. Career training involves progress through a series of clearly defined steps (work and/or education) leading to a desired career.

It should be noted that there are alternate routes upward through various career lattices, and that many basic skills and experiences acquired in one occupation can be used in other career lattices. The acquisition of certain skills permits horizontal as well as vertical mobility between various careers, such as clerical, housekeeping, or drafting and mapping. For example, basic drafting skills can lead to a career as a draftsman, as a mapmaker, as a modelmaker, or as a planner; or may lead into engineering and many other fields.

STUDENT LEARNING ACTIVITIES

- Define these terms: career lattice, career mobility, and entry level job.
- Visit a local planning, urban renewal, or development agency.
- List and describe preprofessional entry level jobs in each of the major job families in rural, urban, and community development.
- Visit the state employment office to determine the kinds of job openings in this area.
- Discuss with other students or a counselor the typical activities of each entry worker in this work.

Figure 9 - Typical Career Lattice - Community Action

Figure 10 - Typical Career Lattice - Urban Renewal

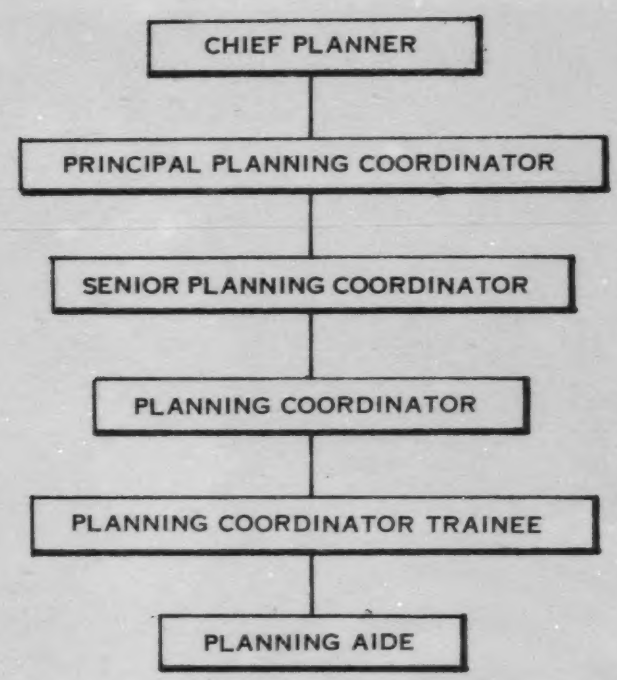

Figure 11 - Typical Career Lattice - Planning

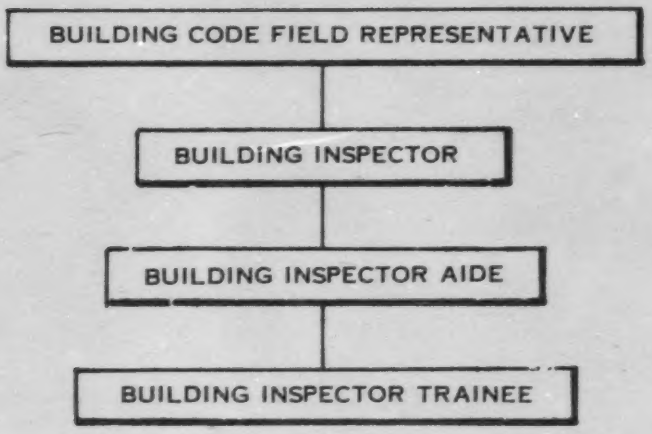

Figure 12 - Typical Career Lattice - Building Inspection

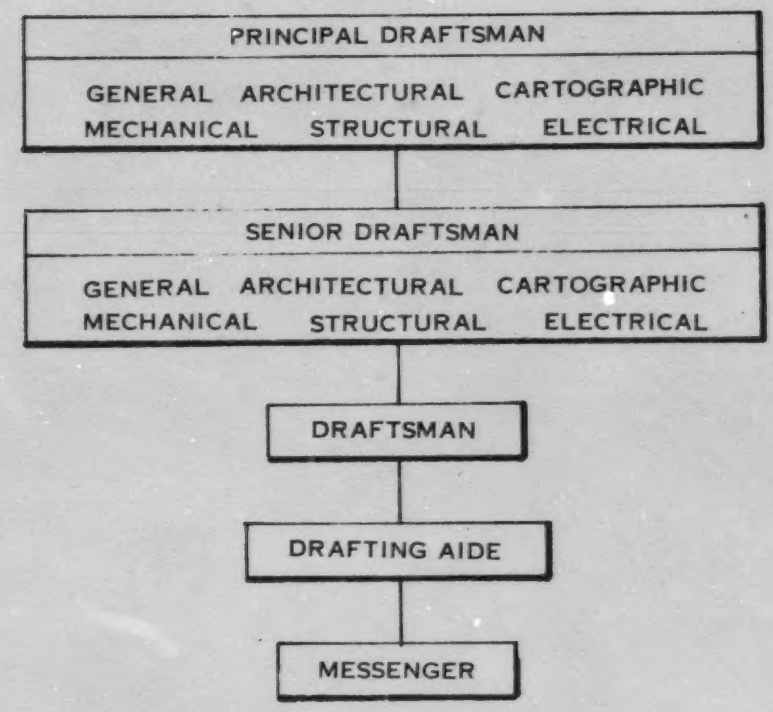

Figure 13 - Typical Career Lattice - Planning & Drafting

- Construct a typical career ladder for one or more job families showing the upward and horizontal mobility of the career ladder.

TEACHER MANAGEMENT ACTIVITIES

- Visit a local planning, urban renewal, or development agency and view on-the-job activities typically found in this development.
- Discuss the many basic similarities for entry level job requirements found both in the private and public sectors of employment.
- Invite a public planning agency planner to discuss with students the role of his agency, its potential for job employment opportunities, and the types of jobs and skills desired.
- Prepare a bulletin display of a "career ladder" showing photographs, pamphlets, salaries, and job descriptions for a specific development career family.

RESOURCES

Dictionary of Occupational Titles, Department of Labor, U.S. Government Printing Office, 1965.

Principles and Practice of Urban Planning, International City Managers Association, 1968.

Opportunities in City Planning, Marjorie S. Berger, Vocational Guidance Manuals, 1961.

Studying Your Government, Roland J. Warren, Russell Sage Foundation, 1955.

Government Careers and the Community College, Andrew S. Korim, American Association of Junior Colleges, 1971.

Careers in Public Planning and Administration, Angelo Cohn, Henry Z. Walck, 1966.

Your Career in Civil Service, Robert A. Liston, Julian Messner, 1966.

City Employment in 1969, Bureau of the Census, Department of Commerce, U.S. Government Printing Office, 1970.

I Like It Here, Modern Talking Picture Service, (Film, 17 min., 35 mm, color, sound, free loan), 1970.

Unit 6 Employment Prospects

INSTRUCTIONAL OBJECTIVES

1. Ability to identify at least five sources of information and statistics concerning employment outlook in rural, urban, and community development.

2. Ability to compare data dealing with the employment expectations of jobs in rural, urban, and community development, and with student's own job goals.

3. Ability to discuss the overall employment trends, both short range and long range, in the general area of rural, urban, and community development.

CONTENT

Employment Outlook. At the present time, the area of rural, urban, and community development is one that is expanding at a tremendous rate, and all indications are that it will continue to employ more and more workers in the foreseeable future. The rebuilding of America's cities, the growth of the suburbs, the preservation of open spaces, and the protection of the rural areas, as well as shifting housing and working patterns, and the general mobility of the overall population, have created tremendous pressures to plan for orderly growth, changes, and planning in both rural and metropolitan areas. Almost all communities in America are involved to some degree in planning. This in turn has generated great demands for both professionals and paraprofessionals.

Paraprofessionals perform the support functions such as drafting, mapping, aiding building inspections, or assisting surveyors, in addition to housekeeping and maintenance duties. Professionals are in great demand and the shortage of qualified planners is expected to continue for some time. In a recent year, there were about 2,000 vacancies in planning agencies, according to the American Society of Planning Officials. More

recently, it was estimated that there were only about 600 university graduates in planning to fill some 8,000 job vacancies.

It is expected that the construction of new cities and towns, the development of transportation systems, the need for recreation and open areas, the rebuilding of cities, and environmental planning, will continue to generate a need for a great number of workers at both the professional and the paraprofessional levels for some time to come. This may be categorized as one of the most highest employment growth fields.

Employment Information and Statistics. The most readily available sources of information on employment are the school guidance offices and the local newspaper classified columns. Almost all libraries have a wide range of books, pamphlets, brochures, and other materials related to career information and employment trends in this field. *The Occupational Outlook Handbook*, the *Occupational Outlook Quarterly*, and other publications of the Bureau of Labor Statistics, U.S. Department of Labor, are also excellent sources. Many states and major localities also offer free materials of this general nature.

Information may be obtained from the State Employment Office, the State Labor Department, and the local Civil Service Commission. The following professional association and governmental agencies are among those which have materials concerning employment prospects:

American Institute of Planners
917 15th Street, N.W.
Washington, D.C. 20005

American Society of Planning Officials
1313 East 60th Street
Chicago, Illinois 60637

American Congress on Surveying & Mapping
Woodward Building
Washington, D.C. 20005

American Society of Landscape Architects
2013 I Street, N.W.
Washington, D.C. 20006

American Institute of Architects
1735 New York Avenue, N.W.
Washington, D.C. 20006

American Institute for Design & Drafting
305 S. Andrews Avenue, Suite 610
Fort Lauderdale, Florida 33301

American Federation of Technical Engineers
1126 16th Street, N.W.
Washington, D.C. 20036

Engineers Council for Professional Development
345 East 47th Street
New York, New York 10017

Regional Office
Bureau of Labor Statistics
U.S. Department of Labor
Address listed in *Occupational Outlook Handbook*

STUDENT LEARNING ACTIVITIES

- Discuss career possibilities and requirements for employment as a rural, urban, and community development worker in your community.
- Study the school library file on statistics and information on the job expectations in this area.
- Learn about the employment opportunities available in your own area in this work.
- Discuss local educational opportunities available in your career interest area.
- Contact a teacher or guidance counselor who is familiar with the entrance requirements for an institution of higher learning that prepares professionals in your choice of career area, and discuss your interests and qualifications.
- Write a short summary of your employment goals.
- Prepare a report for class discussion on the employment trend statistics, entrance requirements, and employment potential for jobs in rural, urban, and community development, in a specific area of community action, planning, building and zoning, and acquisition.

TEACHER MANAGEMENT ACTIVITIES

- Subscribe to the *Occupational Outlook Quarterly*, and ask students to make periodic reports on employment trends, wages, etc., as described therein.
- Arrange for students to visit the local state employment service office and discuss the employment outlook in rural, urban, and community development areas.
- Arrange for a representative of the Civil Service Office to discuss with students examinations and other job entry qualifications.

- Compile a file of newspaper listings and accounts of civil service job opening announcements, salaries, resignations, and other changes for class discussion or bulletin board display.

- Arrange for a comparative class discussion of students' employment goals, and the employment outlook locally and nationally in these fields in the major job families.

- Compile a file of educational institutions that offer course work in these fields.

- Secure employment application forms from various agencies and conduct a class discussion on the types of information asked for.

- Compile an information file on local agencies involved in these areas of development based on newspaper accounts, public relations announcements, career announcements, etc.

- Secure the correct titles, function, contact person, and addresses of local agencies involved in this work.

- Arrange for various agencies involved in rural, urban, and community development to provide speakers for class presentations.

- Arrange for students to attend public information meetings, hearings, and other types of presentations given to the community by agencies involved in these areas.

- Request local agencies involved in rural, urban, and community development work to provide classroom quantities of pamphlets, booklets, and other types of public information notices.

- Arrange for a field trip to a project being constructed, planned, acquired, or changed by an agency involved in this development.

- Compile a listing of names and addresses of national organizations involved in this field.

- Contact various agencies, foundations, or associations and determine the type of information, financial aids, and other types of assistance they may offer prospective entering workers and/or students.

RESOURCES

Tenant Services Personnel: 48 Job Descriptions from Large Housing Authorities, National Association of Housing and Redevelopment Officials, 1970.

Principles and Practice of Urban Planning, International City Managers' Association, 1968.

Education and Career Information for Planning and Related Fields, American Society of Planning Officials.

The Challenge of Urban Planning, American Institute of Planners, 1970.

Section 6

PUBLIC SAFETY, CORRECTIONS, AND JUDICIAL SERVICES

Here are the contents of Section 6 of the Orientation Curriculum Guide.
We suggest you read it before you read the text.

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Section 6

PUBLIC SAFETY, CORRECTIONS, AND JUDICIAL SERVICES

Unit 1 Primary Functions of Public Safety, Corrections, and Judicial Services

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the three major branches in the American system of government, and to explain the position of public safety, corrections, and judicial services in the structure of the American system of government.

2. Ability to identify the major job families in public safety, corrections, and judicial services, as well as describe the nature of the work for each.

CONTENT

Descriptive Overview. The major occupational group which embraces the fields of Public Safety, Corrections, and Judicial Services, is concerned with the protection of human and property rights as well as the resolution of related conflicts. The Judicial Branch, together with the Executive Branch, forms a part of the American system of government. While the Executive Branch administers and enforces the laws, the Judicial Branch complies with the laws, applies them, and judges whether persons are guilty of their violations. Public Safety is concerned mainly with law enforcement and protection against fire. The primary function of law enforcement officers is to enforce the laws, while the function of firefighters is to protect the community against the loss of life, injury, and the destruction of property by fire or any natural calamity.

The Department of Corrections administers the correctional system for adults convicted of felonies and committed by the courts to the Director of Corrections for terms prescribed by law. The Department also maintains a program of treatment designed to help each inmate to become prepared vocationally, academically, physically, and psychologically to take his place in free society. The Department also supervises parolees and addict out-patient psychiatric clinics, Halfway Houses, and anti-narcotic testing facilities.

The Department of Justice is the chief law office of the state. This Department interprets the laws, renders opinions, and represents the state in civil and criminal proceedings. It maintains central fingerprint and criminal record files, compiles statistics pertaining to crime, assists peace officers in civil and criminal investigations, and participates in direct enforcement of the laws relating to use, possession, and sale of narcotics. The Department also passes on the constitutionality of each law passed by the Legislature for the final consideration of the Governor, and represents the state on all criminal and civil matters before the Appellate and Supreme Courts.

The major authority of government which protects the health, safety, and welfare of its people is the Police Department, with the primary function of law enforcement. However, their work is not limited only to law enforcement, but covers also work in courts, prisons, and probation.

Major Job Families. The Public Safety, Corrections, and Judicial Services occupational group includes five major job families: law enforcement, fire protection, courts, corrections, probation, and parole. (Civil Defense is a function of Public Safety Enforcement.)

All these job families deal with the protection of human rights. Health, safety, welfare of the people, and property rights include some of the areas which fall under this major occupational group. People working in the public safety, corrections, and judicial services field are expected to perform competently a broad range of duties in accordance with the specific job family.

STUDENT LEARNING ACTIVITIES

- View films on *You and the Law*, and participate in discussion of the films.
- Prepare at least three questions on the primary functions of public safety, corrections, and judicial services, and discuss these with resource people in the major job families.
- Describe the fields of public safety, corrections, and judicial services, and identify the three major branches in the American system of government.
- Write a short overview of the occupational group stating the main protective duties performed within this group.
- List the major job families and compare the predominant concerns and duties of each group.

TEACHER MANAGEMENT ACTIVITIES

- Arrange for visit by resource people in the major job families.
- Have students visit local agencies in the public safety, corrections, and judicial services, and observe the primary functions of workers. Have students collect materials and information on the functions and duties of workers in this occupational group. Help students display materials and information, and share with their peers.
- Have students form small groups to discuss and compare the primary functions of the six job families.

RESOURCES

You and the Law, Guidance Associates of Pleasantville, (Filmstrips, Part I, 14 min.; Part II, 15 min.; Discussion Guide, purchase), 1972.

Police Science for the Young American, V. A. Leonard; Charles C. Thomas, 1968.

Police and Public Safety, R. E. Clift, W. H. Anderson Co., 1963.

Law Enforcement; An Introduction to the Police Role in the Community, T. F. Adams; Prentice-Hall, 1968.

Introduction to Law Enforcement and Criminal Justice, A. C. Germann, F. D. Day, R. R. J. Gallarti; Charles C. Thomas, 1968.

Introduction to Police Science, J. L. Sullivan; McGraw-Hill, 1966.

President's Commission on Law Enforcement, 6 volumes, U.S. Government Printing Office, 1968-69.

Your Future As a Policeman--Policewoman, Harcourt, Brace and Jovanovitch, (Audio Tape Reel), 1969.

Law and Its Enforcers, Westinghouse Learning, (Audio Cassette), 1970.

Modern Law Enforcement and Police Science, Charles C. Thomas, 1967.

The Police, The Judiciary, and the Criminal, Charles C. Thomas, 1969.

Introduction to Criminal Justice, J. R. Lansberry, Davis Publishing Co., 1968.

Federal Courts and Law Enforcement, McGraw-Hill, (Filmstrip, 38 frames, black and white, purchase), 1969.

A Study of the Fireman's Occupation, D. Allen, W. S. Bodner, R. Lans, J. Meyer; Division of Vocational Education, University of California, 1968.

Unit 2 Background, Organization, and Operations - Public Safety, Corrections, and Judicial Services

INSTRUCTIONAL OBJECTIVES

1. Ability to demonstrate knowledge of law enforcement agencies and their roles at the different levels by identifying at least four general objectives of law enforcement.

2. Ability to explain the components and the structure of law enforcement in the United States.

3. Ability to identify the various law enforcement agencies, explain their functions, and typical organizational pattern.

4. Ability to demonstrate knowledge of the mission of police by listing the basic police purposes and at least five major tasks the police must perform to accomplish their missions.

5. Ability to explain the organization of the police department, outline the organizational relationships and primary functions of administrative units, and describe the authority and duties of personnel.

6. Ability to identify the major police operations and explain their functions.

7. Ability to identify the major fire safety and prisons operations, and explain the functions of firemen and correctional officers.

8. Ability to demonstrate knowledge of the state and federal law enforcement agencies by describing the development, the authority and duties, and the major units of the state and federal law enforcement agencies.

9. Ability to identify the major units of related law enforcement agencies and describe their authority and duties.

CONTENT

Origin and purpose of Law Enforcement and Public Safety. Law enforcement dates back to the time of Hammurabi, a Babylonian ruler who lived about 2000 B.C.; records show existence of laws to assure order in the community. With the development of civilization, law enforcement has also developed. The basic concepts of U.S. law enforcement originated in England; for example, the New York City Police Department was formed in 1834 along the general lines of Scotland Yard.

The police belong to the Executive Branch of our government and enforce the laws established by the Legislative Branch, and interpreted by the Judicial Branch. Judgment and punishment of offenders is performed by other branches of our constitutional government. Federal, state, and local law enforcement agencies operate in their own spheres of jurisdiction, although the American police and fire prevention forces are free from federal or central control. Each community is responsible for the establishment and administration of its own police department, and its own fire department.

Different types of law enforcement agencies had different origins. The municipal police force is the most common and important branch of local government. Some police forces have been formed for specific needs, e.g., the law agencies created at the state and federal levels for the purposes of taxation, licensing, and other revenue laws. Narcotics bureaus, alcoholic control departments, and highway patrols are among the departments which have statewide jurisdiction. Because of their nationwide responsibilities, federal agencies have no geographic boundaries, and cooperate not only with state police, but also with police of foreign countries.

Organization and Operation at the Local Level. The organization and operation of the Municipal Police Department varies with the department and the district. The basic police purpose is to enforce laws in a designated district. To accomplish their mission, the police must perform these major tasks:

the prevention of criminal activities,
the repression of criminal activities,
the arrest of law violators,
the regulation of people in their noncriminal activities,
the performance of public duties.

The organization of the department defines the tasks of the police, and provides coordination and control in their work of law enforcement. Organizational relationships are similar in

most police departments. The administrative units of a police department include the Office of the Chief, Departmental Divisions, special units, auxiliary units, and staff services.

Law enforcement officers have many duties, varying with the department of employment. The patrolman enforces laws in a given district. He is aided by a dispatcher, who answers telephone complaints and dispatches patrolmen to the scene. Some of the other people who help the patrolman enforce laws include the Precinct Commander, Desk Lieutenant, Patrol Sergeant, Police Cadet, Detective, Juvenile Officer, Traffic Officer, and Policewoman. In addition, there are narcotics officers, who investigate cases involving the use of narcotics; hit-skip officers, who gather physical evidence from automobile accidents for analysis; and fingerprint technicians, who obtain, classify, and file fingerprints for identification.

Major divisions of police operations include patrol, the investigative process, traffic supervision, juvenile delinquency prevention and control, and auxiliary service units.

The main functions of patrol operations are to prevent crimes and to take corrective measures when incidents occur. These functions call for methods of patrol to accomplish: the prevention of the development of criminal and other anti-social tendencies; the reduction of the opportunity for law violation; the preservation of the peace when it is threatened; and the provision of a variety of services to the public. Patrol functions provide basic police services, and may be conducted on foot, by car, by helicopter, and other means.

The investigative process has the principal purpose of investigating crimes, recovering stolen property, arresting suspected and identified criminals, and preparing cases for prosecution. The crimes more frequently handled by this group of officers include criminal homicide, robbery, aggravated assault, burglary, larceny, automobile theft, assault and battery, forgery, embezzlement, stolen property offenses, weapon violations, and offenses against the family and children. The investigative methods incorporate the detective division and auxiliary units, such as the crime laboratory.

Traffic supervision has the primary police traffic function of the promotion of safety on the streets and highways, with particular reference to drivers and pedestrians. The major traffic responsibilities are the enforcement of traffic laws, enforcement of parking ordinances, enforcement of requirements for vehicles and vehicle operators, pedestrian control, investigation of traffic accidents, and traffic education.

The Juvenile Delinquency Prevention and Control Division has the purpose of protecting dependent children, and preventing

crime by eliminating (or inhibiting) the desire to commit criminal acts by juveniles who have not reached a certain minimum age, which varies from state to state, the lowest being eighteen years of age. The police officers try to discover a criminal or delinquent behavior pattern at an early age, and then try to prevent the youth from repeating the delinquency or the crime.

Auxiliary service units include communications, records, detention, and laboratory. Each unit has varied methods of helping to prevent crime and support law enforcement.

Organization and Operation at the State and Federal Level. State and federal law enforcement agencies are highly specialized in nature. The state agencies, of course, are confined within the state, while the jurisdiction of the federal agencies coversthe entire country.

Each law enforcement agency is divided into several headquarters' divisions. For the state law enforcement agencies, the major units are traffic enforcement; crime laboratory; and investigative, identification, and regulatory units.

The major units of the federal law enforcement agencies include the Department of Justice, the Department of Treasury, the Department of Defense, and the Department of State. Related agencies include courts, probation, corrections, and parole.

All the above agencies are working in unison toward a common goal: law enforcement in public safety, corrections, and judicial services.

STUDENT LEARNING ACTIVITIES

- View films on fire prevention and law enforcement and discuss with peers.
- Make a list of the law enforcement agencies and discuss each one.
- Participate in discussion on the role of law enforcement at the local, state, and national levels.
- Write a short report on law enforcement and public safety agencies and their role at the different levels.
- Identify at least three general objectives of law enforcement.
- Report to class on actual experiences with police, court, probation, and fire prevention.

- Write a short article on the powers and duties of policemen and firefighters.
- Write "actual" police reports from information transmitted on simulated criminal activity.
- Research the functions and duties of the policeman. Conduct structured role-playing centered around a problem with which a policeman might deal.
- Act out a typical problem situation with one of the members of the police force.
- Report to class on actual experiences with criminal justice system, police, court, probation, etc.
- Hold panel discussion about various careers in law enforcement and related fields.
- Take field trips to different agencies, with opportunity to question employees of same.
- Listen to tapes of experienced employees in criminal justice system, such as might involve police dispatcher's calls, reports of training officer of local police department, and an F.B.I. agent describing a day's tour of duty.
- Hold informal rap session with Police Cadets concerning the reason they chose law enforcement for a career.
- Report, both orally and written, on several careers in criminal justice system which you would like to pursue for possible future employment.

TEACHER MANAGEMENT ACTIVITIES -

- Collect, and make available to students, information on law enforcement agencies.
- Arrange to have a law enforcement officer and a fireman speak to students and answer their questions.
- Arrange to have a policeman bring tangible items into classroom that students can handle and discuss.
- Arrange a field trip to local police station and have some students purchase their bicycle licenses, etc., if they have not already done so, or participate in some other activity at the police department. Repeat field trip to a local fire station.
- Subscribe to such periodicals and journals as these:

Police Chief (Journal), International Association of Chiefs of Police, 1319 18th Street, N.W., Washington, D.C., 200036.

Police (Journal), Charles C. Thomas, 301-327 E. Laurence Avenue, Springfield, Illinois, 62703.

Law and Order Magazine (Journal), 72 West 45th Street, New York, New York, 10036.

The National Sheriff (Journal), National Sheriffs' Association, Suite 209, 1250 Connecticut Avenue, N.W., Washington, D.C., 20036.

- Prepare and make available to students file of pamphlets, magazines, brochures, books such as *Occupational Outlook Handbook* and *Dictionary of Occupational Titles*, articles about law enforcement and related fields, etc.

- Arrange field trips to different agencies and opportunities to question employees.

- Divide students into small groups and conduct structured role-playing around problems with which a policeman might deal. Prepare a series of problem situations, such as trespassing, theft, shoplifting, vandalism, runaways, drugs, or alcohol. Write problems on individual slips of paper and let students draw for topics.

- Introduce such resource people into the classroom as a policeman, private detective, correctional officer, FBI agent, Secret Service Agent, state trooper, etc.

RESOURCES

Law Enforcement, An Introduction to the Police Role in the Community, Thomas F. Adams, Prentice-Hall, 1968.

Opportunities in a Law Enforcement Career, James D. Stinchcomb, Universal Publishing, 1971.

A Job With a Future in Law Enforcement and Related Fields, Flora R. Schrieber, Grosset and Dunlap, 1970.

Introduction to Law Enforcement, A.C. Germann, Frank D. Day, and Robert R.J. Gallaxie, Charles C. Thomas, 1968.

Principles of Law Enforcement, Edward Eldefon, Allan Coffey, and Richard C. Grace, John Wiley & Sons, 1968.

Task Force Report: The Police, President's Commission on Law Enforcement and Administration of Justice, U.S. Government Printing Office, 1967.

Introduction to Police Science, John L. Sullivan, McGraw-Hill Book Company, 1966.

Police Science for the Young American, V.A. Leonard, Charles C. Thomas, 1968.

Your Career in Law Enforcement, Robert A. Liston, Pocket Books, 1965.

Police Work With Juveniles, J. P. Kenney, D.G. Pursuit, 3rd Edition, Charles C. Thomas, 1965.

Law Enforcement and the Youthful Offender: Juvenile Procedures, E. Eldefonso, John Wiley & Sons, 1967.

Police Administration, 3rd Edition, Orlando W. Wilson and Roy C. McLaren, McGraw-Hill, 1972.

Police Operations; Policies and Procedures, J.P. Kenney, J.B. Williams, 2nd Edition, Charles C. Thomas, 1968.

Patrol Procedure, G.T. Payton, 3rd Edition, Legal Book Corporation, 1967.

The Patrol Operation, G.W. O'Connor, C.G. Vanderbosch, International Association of Chiefs of Police, 1967.

Municipal Police Administration, International City Management Association, 1970.

The Police Traffic Control Function, Charles C. Thomas, 1968; also, P.B. Weston, 2nd Edition of same, 1968.

The Traffic Officer in Court (Film, 10 min., black and white, purchase), American Mutual Insurance, 1969.

Police Administration and Criminal Investigation, ARCO Publishing Co., 1968.

Introduction to the Fire Service, International Fire Service Training Association, 1971

Organization of Fire Departments, California State Department of Education, 1966.

Operation of Small Community Fire Departments, W.Y. Kimball, National Fire Protection Association, 1968.

Municipal Fire Administration, D.S. Arnold, International City Management Association, 1967.

Fire Protection Administration, Texas A & M University, 1970.

The Administration of Justice, Paul B. Weston, and Kenneth M. Wells, Prentice-Hall, 1967.

Manual of Correctional Standards, American Correctional Association, 1970.

Courts of Law, Franklin Watts, 1969.

Unit 3 The Judicial System in America

INSTRUCTIONAL OBJECTIVES

1. Ability to demonstrate knowledge of the judicial system in America by identifying the main branches of the judicial system, and giving a detailed description of the major tasks of each.

2. Ability to explain the functions and the typical organization of each of the branches of the judicial system.

3. Ability to demonstrate knowledge of the concept of justice by comparing the past and the present emphasis on justice, and identifying the main ways of providing justice.

4. Ability to demonstrate knowledge of the governmental system of providing justice by listing the primary duty of at least six of the criminal justice agencies.

5. Ability to list the actual steps in the Criminal Justice System and discuss them.

6. Ability to demonstrate knowledge of the functions of probation and parole in the Criminal Justice System by writing a short essay on probation.

CONTENT

Administration of the Judicial System in America. The judicial system in America is formally administered by, and organized into, two main branches: the Civil Justice System, and the Criminal Justice System.

The *Civil Justice System* is principally concerned with private disputes between people. Public agencies (except the courts) are involved in the enforcement process. Many disputes in civil law are settled according to the rules (such as torts) set down by the courts or legislatures. Many civil law disputes

involve enforcement of privately adopted rules and duties; for example, contracts. When most civil law cases go to court, they are resolved with one party owing the other some money. Penalties are rarely assessed against the wrongdoer.

The *Criminal Justice System* has to do, mainly, with the enforcement by many public agencies of public rules regarding behavior of all citizens. Criminal statutes generally fall into two categories - misdemeanors (minor crimes), and felonies (major crimes).

In addition to the foregoing, the Justice System in America is administered in other specific areas by Administrative Agencies and the Juvenile System, each of which is concerned with both civil and criminal law.

The *Juvenile System* is very much like the Criminal System, but additional effort is made to keep juveniles out of further trouble, and to avoid giving them the stigma of a "criminal" record.

The *Administrative System* gives effect to public policies and programs. In the process, it exacts penalties of offenders, similarly to the Criminal System, or resolves disputes without inflicting penalties, in the same manner as the Civil System. In addition, it sometimes makes rules, comparable to a legislature; dispenses public benefits, like an executive agency; and decides cases, in the manner of a court.

The Concept of Justice. Justice has often been considered as a way of taking revenge on law breakers; this is a concept that is rapidly changing. In the past, society's basic laws were often religious or moral codes; today, most laws in the United States are criminal statutes. Similarly, in the past, emphasis was placed on punishment and revenge; but, in the United States today, criminal justice emphasizes removing dangerous people from society and rehabilitating them so that they will not return to crime. Justice also refers to the use of principles to help settle disputes between two or more people.

Means of Providing Justice. Justice, in earlier days, was provided in large part by individual efforts; that is, protecting the victim from a "bully," or "getting even with someone." Informal group efforts of providing justice were through vigilante groups, armed strike breakers, and gangs. Formal methods are now provided or assisted by government, and laws are enforced by the police, lawyers, courts, jails, etc. The tendency is to replace informal methods of providing justice with laws established by the government, and agreed upon in a democratic manner.

The Governmental System of Providing Justice. Each criminal justice agency has a primary duty:

The police have the primary duty of apprehending the offender and getting evidence to prove his innocence or to convict the suspect;

Defense lawyers have the primary duty of protecting the interests, rights, and privileges of the defendant;

The prosecutor persuades others of the suspect's guilt;

The judge and the jury have the primary duty to impartially decide between the claims of prosecutor and defense counsel;

The correctional officer's primary duty is to house the convicted person, provide programs to rehabilitate him, and to be a resource person when he needs help;

The parole and probation officers keep the ex-convict out of trouble and engaged in constructive activities.

The Criminal Justice System. There are twelve steps in the Criminal Justice System in America:

1. *The Police*. In the Criminal Justice System, the police begin by making a response to a complaint, which is usually followed by arrest of the party. Interrogation and other forms of investigation are carried out by the police.

2. *Jail* is the next step in the Criminal Justice System. The facilities, the activities and programs offered inmates, the rules concerning visits by relatives, lawyers, etc., are explained to the inmate.

3. *Pre-Trial Release*. Next, the bondsmen and other agencies may become involved in pre-trail release. The right to bail and other procedures are considered.

4. *Providing Counsel*. This is the next step in our legal system - the defendant has rights to counsel at all phases. Ways of providing counsel include a Legal Aid Agency; an assigned counsel system; or private retention of counsel: that is, a private firm specializing in criminal matters.

5. *Prosecutor*. The next phase and person to be involved is the prosecutor, who operates as part of the District Attorney's office. The District Attorney can also serve as trial officer.

6. *Arraignment and preliminary hearing* follow. The case is presented to a grand jury, and indictment can result.

7. *Criminal Trial*. Trial is the next step in the Criminal Justice System. The participants include the judge, the defendants, the jury, the plaintiff, the bailiff, the clerk, the lawyers, and the stenographers.

8. *Presentencing Investigation* - To determine mitigating or modifying factors, which might have an effect on the sentence or punishment.

9. *Sentence*. This is followed by passing the sentence.

10. *Probation*. Probation might come next, to be followed by imprisonment.

11. *Imprisonment*, which may involve minimum security and include reformatory, or it may be maximum security in a prison. Then again, it may include rehabilitation, skills training, work release, and other programs.

12. *Parole*. This is the last step in the Criminal Justice System. Some institutional treatment methods are Halfway Houses, job referral systems, and the use of community resources.

STUDENT LEARNING ACTIVITIES

- List the branches of the judicial system and discuss each one.
- Participate in discussions concerning the role and function of each of the branches of the judicial system.
- Select one branch of the judicial system in America and write a detailed report on it.
- List the actual steps in the Criminal Justice System and discuss them.
- Write a short essay on probation and parole, stressing the functions of these steps in the Criminal Justice System.
- Observe the workings of a criminal trial. Discuss the case (off the record) after the trial with the judge and lawyers. Write a short commentary on your observations.
- Compare and contrast the past and the present emphasis on justice.
- Discuss and give examples of the different elements of the concept of justice. Use personal experiences, as well as TV, magazine, etc., to illustrate the concepts.
- Identify and list the main ways of providing justice.

- Compare the advantages of formal as compared with informal means of achieving justice; that is, police, prosecutor, and judge versus gang methods.

- List the primary duty of at least six of the Criminal Justice Agencies.

- Visit at least two criminal agencies and write down your observations of the activities. Discuss in class with peers.

TEACHER MANAGEMENT ACTIVITIES

- Collect and make available to students file on the judicial system in America.

- Arrange to have a probation officer speak to students on the juvenile system and answer students' questions.

- Arrange for small group discussions of the students' reports on one branch of the judicial system in America, and provide feedback to students.

- Illustrate by concrete examples, the use of newspapers, magazines, TV programs, etc., as information supplements to the materials on the judicial system in America.

- Trace the actual steps of the Criminal Justice System through resource people and field trips, such as police, defense lawyer, prosecutor, judge, tour of jail, etc.

- Arrange trip to observe criminal trial. Arrange for discussion of the case after the trial with the judge and lawyers.

- Introduce a probation officer into class as a resource person who will cover the subject of punishment for criminal activities, and clarify for the class the seriousness of arrest and conviction. Presentation should include also parole plans, type of treatment, and overall function of parole in the Criminal Justice System.

- Subscribe to periodicals and journals such as:

  Journal of Criminal Law, Criminology and Police Science, 357 E. Chicago Avenue, Chicago, Illinois.

- Prepare students for field trips. Make arrangements for trips to criminal justice agencies.

- Arrange for visit to class by resource people, such as probation officer, correctional officer, etc.

RESOURCES

The Administration of Justice, Paul B. Winston and Kenneth M. Wells, Prentice-Hall, 1967.

The General Administration of Criminal Justice, V. A. Leonard and Harry W. More, New York Police Science Series, Foundation Press, 1967.

Criminal Law, R. Bryce Young, McGraw-Hill, 1972.

Modern Criminal Procedure, Livingston Hall and Yale Kamisar, West Publishing Co., 1966.

Journal of Criminal Hall, Criminology and Political Science.

Criminal Investigation, C. G. Vanderbosch, International Association of Chiefs of Police, 1968.

Crime and the Law, Congressional Quarterly, 1971.

Crime and the Courts, Carousel Films, (Film, 37 min., black and white, purchase), 1972.

Justice Delayed, Justice Denied, Carousel Films, (Film, 40 min., black and white, purchase), 1972.

Criminal Law and Its Processes: The Law of Public Order, Charles C. Thomas, 1969.

Unit 4 Functions and Duties of Workers and Working Conditions

INSTRUCTIONAL OBJECTIVES

1. Ability to discuss the general operation and the duties of workers in public safety, corrections, and judicial systems.

2. Ability to describe the major duties performed by workers in public safety, corrections, and judicial systems.

3. Ability to compare and contrast the general duties of workers in public safety, corrections, and judicial systems.

4. Ability to distinguish and describe the entry level jobs that exist within public safety, corrections, and job families.

CONTENT

Nature of the Work and Duties. The duty of maintaining public order, enforcing regulations for the prevention and detection of crime, and promoting public health and safety, is entrusted to the police.

City Police. Police officers are local government employees whose job is to prevent criminal activities, investigate crimes, and apprehend and assist in the prosecution of offenders. The policemen who work in a small community usually have varied police duties. In a day's work they may direct traffic at the scene of a fire, investigate a housebreaking, and give first aid to an accident victim. In a large police department, officers are usually assigned to a specific police duty. Most policemen are on patrol or traffic duty. Some are assigned to special work, such as accident prevention or operating communications systems, while others are detectives (plainclothesmen) assigned to criminal investigation. Microscopic analysis, firearms identification, handwriting, and fingerprint identification; these are some of the other investigative specialties

performed by policemen. In large cities, some officers are specially trained to work with mounted and motorcycle police, harbor patrols, helicopter patrols, canine corps, mobile rescue teams, youth aid, and emergency services, or other special units.

Many city police departments include women on their police forces. Policewomen are usually assigned cases which involve women and young people. They may work with juvenile delinquents, locate lost children and runaways, or search, question, book, and fingerprint women prisoners. They are sometimes assigned to detective squads where they work mostly on crimes involving women.

State Police. Still other policemen work at the state level, performing diversified activities. Their titles indicate their primary protective service responsibilities.

State Highway Patrolmen or troopers are primarily responsible for the safe, rapid, and efficient utilization of the state's highway system. Highway Patrolmen (as the name suggests) patrol the highways to insure that traffic laws and regulations are obeyed, and issue traffic tickets to violators. They assist at the scene of traffic accidents, give first aid to injured persons, summon ambulances and other emergency equipment, direct traffic to avoid additional accidents, and investigate accidents.

Highway Patrolmen also provide services to motorists on the highways, summoning road service by radiophone in case of mechanical trouble, directing tourists to destinations, and give information as required. They also provide traffic assistance and control during road repairs, fires, and other emergencies, or for special occurrences (such as parades, celebrations, and sporting events). Some Highway Patrolmen check the weight of commercial vehicles, conduct driver examinations, inspect passenger vehicles, and serve as public safety information officers.

State Policemen perform on a statewide basis the same functions police officers do for local government, suppressing criminal activities, investigating crimes, and apprehending and assisting in the prosecution of offenders. They also provide security for public officials and state buildings, and some do more specialized work, such as fingerprint classification, chemical or microscopic analysis, instruction of trainees in state police academies, and piloting police aircraft. Some work with mounted (horse) patrols, canine corps, and harbor patrols. Others are assigned to clerical duties, such as preparation of reports and maintenance of police records, or to administrative duties, such as Chief of a division or bureau responsible for training or investigation. In some states the investigation

work is performed by an agency known as the Bureau of Investigation.

Firefighters. The duty of protecting the lives and property of citizens from fires is the responsibility of the firefighters or firemen. In public safety agencies, the fireman protects the community from fire hazards, inspects buildings, clears and polishes equipment, dries firehose, and maintains the firehouse. He is employed by cities, villages, counties, federal and state agencies, as well as military bases, shipyards, and industries. While on duty at the fire station, these men must be prepared at a moment's notice to rush to a fire and handle any emergency that occurs. Firefighters work in teams and perform specific jobs assigned to them by a commanding officer. They may connect hose lines to hydrants, operate pressure pumps, position ladders, or perform other related duties. Under emergency conditions firefighters are often called on to use their own initiative and judgment in firefighting activities, helping people to safety, administering first aid, and taking care of other emergencies.

Fire prevention is another facet of firemen's duties. Specially trained firemen inspect factories, theatres, and other public buildings for conditions which might cause a fire, and for compliance with local regulations on fire escapes, fire doors, storage of flammable materials, and other possible hazards. Firefighters often speak on fire prevention and safety measures before school assemblies and civic groups. They also participate in practice drills, clean and lubricate firefighting equipment, stretch hoses to dry, stand watch at fire alarm instruments, and verify and record alarms.

Investigators are employed by the Departments of Justice, Health Care Services, Alcoholic Beverage Control, Human Resources Development, Motor Vehicles, and Consumer Affairs.

Entry level positions with the Department of Justice include, investigator services, legal counsels, and narcotic agent trainees. Investigator trainees have police officer powers which include the authority to carry firearms and make arrests. The exact type of work varies with the program of the Department. Other agencies which have investigator trainees include, typically, the Department of Alcoholic Beverage Control, in which an investigator trainee examines applications for licenses to sell alcoholic beverages; the Department of Motor Vehicles, in which the trainee investigates automobile dealers and dismantlers and dealer permit applications; and the Department of Human Resources Development, in which he investigates unemployment, insurance, and tax frauds.

Department of Justice - Courts. Legal Counsels are principally employed by the Legislative Counsel Bureau, State Compensation

Insurance Fund, Public Utilities Commission, Franchise Tax Board, Board of Equalization, and the Departments of Corporations, Human Resources Development, Insurance, Justice, Public Works, and Water Resources.

Department of Justice - Narcotics Agent. Narcotic agent trainees investigate the alleged use or illegal manufacture, distribution, possession, or sale of narcotic drugs; and assist in the prosecution of violators of the State Narcotic Act.

Correctional Services. Correctional officers supervise, safeguard, and train inmates of prisons, reformatories, and camps. They are responsible for carrying out plans developed for correctional treatment, and for the modification of attitudes of persons who have been imprisoned. Correctional officers work directly with correctional treatment specialists who develop, evaluate, and analyze diagnostic findings and data about inmates, prepare social histories, and outline and recommend programs of education, work, vocational training, and counseling. They evaluate the progress of individual offenders, make recommendations to the U.S. Board of Parole concerning the inmate's probable community adjustment, and also work with prisoners, their families, U.S. Probation Officers, and social agencies in developing release plans for inmates. They are employed by the states and the federal government.

Probation and Parole. In the probation job family, important work is being done by probation and parole officers in addition to other correctional workers. Probation and parole officers are part of the correctional system. They work closely with correctional officers and other workers in and out of prisons. These officers assist persons on probation and parole, as well as juvenile offenders, in readjusting to society. They investigate the social history and background of the persons under the jurisdiction of the court and make reports to the court to help the judge in his judicial decisions. These officers also counsel persons on probation or parole, and may help them secure necessary education or employment, and direct them to other services in the community. They also help resolve problems in marital and parent-child relationships.

Overlap of Occupations. The duties performed by workers in some of these major job families tend to be either the same or very similar, and extend into other job families. For example, the duties of police officers are basically in law enforcement, but they extend also into probation and prisons, as well as courts. Police officers serve as court officers or bailiffs, and also as court sergeants. Their duties include the maintenance of order in the courtrooms, and assistance in the operation of courts.

Conditions and Places of Employment.

Police. Newly recruited policemen usually begin on patrol duty in congested business districts, outlying residential areas, or other sections of a community. They may cover the beat alone or with other patrolmen, either in a police vehicle or by foot. While on patrol they remain alert for anything unusual, and note suspicious circumstances and hazards to public safety. They watch for stolen cars and enforce traffic regulations. At regular intervals they keep in touch with police headquarters through call boxes, by radio, or walkie-talkie.

Their work week usually averages forty hours. The 10/4 plan is often used where the officer works 10 hours per day for 4 days only during the week.

Police officers, probation officers, correctional officers, and investigators work over weekends, on holidays, and at night as well as during the day. They work on rotated shifts, and are subject to call at any time their services are needed. In emergencies they may work overtime. Some officers work outdoors for long periods in all kinds of weather and often take risks in capturing and dealing with lawbreakers.

Firefighters work throughout the nation, and usually are full-time paid employees of county and town fire departments. In small towns and rural communities they are helped in their work by paid "call men," and part-time volunteer firemen who serve only when they are needed at a fire.

Firemen are often on duty for a twenty-four hour shift, and then off for twenty-four hours, plus an extra day off at intervals. In some cities, firemen rotate frequently between the day shift, which is ten hours long, and the night shift, which is fourteen hours. Most often firemen work two and a half days per week. The range of working hours for firemen is between forty and sixty hours; the national average work week is about fifty-six hours.

Firefighting involves great risk of life or injury from sudden cave-ins of floors or toppling walls and from exposure to flames, smoke, bad weather, and poisonous, flammable, and explosive gases and chemicals.

Probation and parole officers work mostly in state, county, and city government agencies. Some work in federal government agencies and the remainder in voluntary or private agencies.

Salaries.

Police. Salaries for police officers range from about $7,500 a year in some small cities to over $14,000 in large ones. The

average entrance salary in middle-size cities is about $9,000 per year. Most policemen and policewomen receive regular pay increases during the first few years of employment until a specified maximum is reached. Sergeants, lieutenants, and captains receive progressively higher basic salaries than patrolmen, and top salaries ranging between $9,000 a year in some cities to $40,000 in the larger cities are paid to police chiefs or commissioners. Police officers are usually provided with special allowances for uniforms and required equipment. Pension plans, paid vacations, sick leave, and medical, surgical, and life insurance plans are among the other benefits often provided for policemen. Continuing education may not be required in many cases, but is compensated for in all the job families in this major occupational group.

Firefighters. The average salary for beginning firefighters is about $12,000 per year in the larger cities over 250,000 population and about $9,000 in smaller cities (10,000 to 25,000 population). Experienced firefighters earn between $13,000-$14,000 per year, depending on the size of the city in which they are employed. Fire chiefs receive an average salary ranging from $10,000 to $30,000 per year. Allowances are made for protective firefighting clothing, and many fire departments also provide dress uniforms.

Firefighters are covered by liberal pension plans and receive regular paid vocations. Liberal sick leave, health, and surgical benefit plans, and injury compensation are also provided.

Courts. The salary range of workers in courts varies. For legal counsels, the salary range may vary from $11,000 to $38,000 for the district attorney. The salary range for a narcotic agent trainee is $7,900 to $9,720, while a narcotic agent may receive $8,400 to $10,200. These salary ranges are very approximate and vary from state to state.

Investigators. Investigator trainees receive between $8,100 and $9,500, while the salary range for investigators is $9,500 to $11,500 and up, depending on qualifications, experience, and rank.

Probation and Parole. The beginning salaries of probation and parole officers, as well as correctional officers, average from about $7,630 to $13,000 per year, depending on the educational background of the officer. Assistants, such as correctional work assistants, would receive approximately $7,500 to $9,500 per year. Salaries of case work supervisors average about $13,000 for those with little experience, to about $15,600 and up, for those with considerable experience. Working conditions and fringe benefits are similar to those of the police officer.

STUDENT LEARNING ACTIVITIES

- View films on: *Super Cop; Besieged Majority; Police Unit 2428.*
- Listen to prerecorded tape programs: *Police Officers, Firefighters, State Police Officers,* and discuss.
- Visit a local police station, fire station, and court house, and observe typical duties performed by workers in those departments. Write a short summary on activities observed on field trips.
- Talk to law enforcement officers, firemen, and probation officers, and ask questions about the duties they performed.
- Discuss in small groups the general operation of law enforcement agencies, fire departments, and prisons.
- List at least eight major tasks of public safety, corrections, and judicial service workers, and hold a discussion in class on three of the major tasks listed.
- Participate in discussion on the conditions and places of employment of workers in the major job families.

TEACHER MANAGEMENT ACTIVITIES

- Invite speaker from local court, and from the fire and police departments to speak on their job duties and working conditions.
- Arrange for students to visit local police station, fire station, and court house, and observe workers performing different duties. Arrange room facilities with time for questions and discussions with workers in the agencies.
- Organize students into small groups for discussion on general operation of law enforcement and public safety agencies.
- Arrange a display of information on public safety, corrections, and judicial services.
- Discuss with class in detail the variety of activities performed by workers in public safety, corrections, and judicial services.
- Have students join in discussion on the activities of the entry level jobs in each job family, and compare and contrast the various activities.

RESOURCES

Super Cop, NBC Educational Enterprises, (Film, 25 min., color, purchase or rental), 1970.

The Beseiged Majority, NBC Educational Enterprises, (Films, Reel I, 26 min., color; Reel II, 27 min.), 1970.

Black Cop, Indiana University Audio-Visual Center, (Film, 15 min., black and white, purchase), 1970.

Police Unit 2A26, American Educational Films, (Film, 18 min., color, purchase or rental), 1972.

Police Officers, American Occupations Series, Education Sensory Programming, (Prerecorded tape programs, reel or cassette), 1971.

Introduction to Police Science, John L. Sullivan, McGraw-Hill, 1966.

The Protectors, Consolidated Film Industries, (Film, 28 min., color, purhcase), 1971.

Patrolman, Police Department, ARCO Publishing Co., 1966.

Policewoman, ARCO Publishing Co., 1966.

State Trooper, ARCO Publishing Co., 1966

Police Patrol, Charles C. Thomas, 1968.

The Police, Center Democratic Institute, 1969.

Law Enforcement and the Juvenile Offender, Charles C. Thomas, 1963.

State Police Officers, American Occupations Series, Educational Sensory Programming, (Prerecorded tape programs, reel or cassette), 1971.

Firefighters, American Occupations Series, Education Sensory Programming, (Prerecorded tape programs, reel or cassette), 1971.

The Tasks of Penology: A Symposium on Prisons and Correctional Law, University of Nebraska, 1970.

Unit 5 Recommended Qualifications of Workers

INSTRUCTIONAL OBJECTIVES

1. Ability to discuss the recommended qualifications of public safety, corrections, and judicial services workers.

2. Ability to evaluate his own qualifications and compare them with the recommended qualifications required for entry level jobs.

CONTENT

Age. The age levels of public safety, corrections, and judicial services workers vary. In some job families such as law enforcement, the minimum age requirement for both male and female applicants typically ranges from 18 to 31 or 35 years, depending on the location. Some departments permit men 20 years of age to take the examinations, but delay hiring until they reach 21. For an aide, the minimum age is between 18 and 21 years of age, depending on the location. The maximum age for initial employment in law enforcement usually ranges between 30 to 40 years.

The minimum entry age for firefighters is 21 years, although some departments accept men at age 18. The maximum age ranges up to 40 years.

In prisons, mature men and women are preferred for guards and watchmen positions; employees are frequently hired in the 30-55 age group.

The minimum age in probation work is 21 years of age.

Educational Requirements. In *law enforcement*, the educational requirement for a dispatcher clerk is two years of clerical experience, preferably including experience involving public contact, and education equivalent to completion of the twelfth

grade. For Patrolman and Sheriff, the minimum educational requirements are high school education or its equivalent; however, those who plan a career in law enforcement will benefit by continued college training in police administration, with courses in the social sciences and traffic specialies.

In *Fire Protection*, the educational requirements for Fire Dispatcher and Fireman are high school graduation or equivalent education. In these job families, workers are generally hired on a probationary period.

In the *probation family*, the educational requirement for Counselor is any combination of training and experience equivalent to completion of three years of college, preferably in the field of social sciences. For a Probation Officer, the requirements are graduation from college, preferably in the field of social science, and one year of experience in probation, parole, or social work in a recognized agency.

In the *correctional family*, college level education is often required for workers; as, for example, teachers, who would require a teaching credential in addition to the college degree in their fields.

Physical Requirements. Most departments in law enforcement require a physical examination. The physical requirements are good health, normal hearing, good vision, and normal color vision. Height and weight requirements must be met by both men and women.

A firefighter should be in good health and pass a physical agility test, which typically includes physical feats, such as climbing a 40- or 50- foot ladder, doing chin-ups and push-ups, making a standing broad jump, and running a specified distance. Most departments have a height and weight schedule as part of the medical examination. Applicants having good vision without glasses are preferred; good hearing is needed. A Fire Dispatcher should also be in good health.

Entry level jobs in the other job families have similar physical requirements.

Other Entrance Requirements. In the public safety, corrections, and judicial services, most jobs require applicants to be U.S. citizens. Devotion to duty, a positive attitude, industriousness, loyalty, skillfulness when dealing with people, and the ability to learn rules and regulations, to follow directions, to prepare reports, to think quickly and clearly, and to make sound judgments, are some of the requirements. Resourcefulness, a good memory, the ability to keep confidences, and the physical

and psychological capability to cope with dangerous and hazardous conditions, are often additional requirements. A valid driver's license at time of appointment is required. A person who has been convicted of a felony is disqualified from employment. Residence within the city or in a nearby area may be a condition of employment, but residence requirements may be waived when there is difficulty in recruiting.

STUDENT LEARNING ACTIVITIES

- Study and discuss material on age, education recommended qualification of public safety, corrections, and judicial services workers.
- Analyze your own qualifications and compare them with the recommended qualifications for public safety, corrections, and judicial services worker.
- Write a short report, analyzing and comparing your own qualifications with those for public safety, corrections, and judicial services workers.

TEACHER MANAGEMENT ACTIVITIES

- Prepare and make available to students a file on the age, education, and other requirements for public safety, corrections, and judicial services workers.
- Divide students into small groups and have them analyze and compare their own qualifications for public safety, corrections, and judicial services.

RESOURCES

Law Enforcement. An Introduction to the Police Role in the Community, Thomas F. Adams, Prentice-Hall, 1968.

Occupations Outlook Handbook, U.S. Department of Labor, 1970-71.

Your Highway Patrol Career, California Highway Patrol, 1969.

Unit 6 Career Lattices and Mobility

INSTRUCTIONAL OBJECTIVES

1. Ability to identify entry level jobs in public safety, corrections, and judicial services.

2. Ability to construct a typical "career lattice" for law enforcement, fire protection, courts, prisons, probation, and civil defense job families.

3. Ability to describe typical entry level jobs for workers in the six major job families.

CONTENT

Entry Level Jobs. These, the first jobs in a career, require minimal skill and education, and are usually open to workers without previous work experience in that job. Some localities around the country list entry level jobs for individuals less than 21 years of age; personnel occupying these positions are frequently referred to as "Cadets" or "Aides."

Entry level jobs in public safety, corrections, and judicial services include these examples: Law Enforcement - Patrolman Aide Trainee, Patrolman Aide, and Patrolman Supervisor; Fire Protection - Firefighter Aide; Court - Court Clerk or Court Reporter; Prisons - Correctional Officer; Probation - Juvenile Squad Aide.

The work of newly recruited workers in law enforcement is usually limited to patrol or traffic duty. In fire protection, the new fireman may work on the maintenance of equipment. The initial duties in courts might consist of keeping files or making reports. The entry level jobs in prisons may include analysis of case studies, counseling juveniles, or making field trips to the home and/or places of work of people on probation.

Typical Career Lattices. A career lattice is a series of positions of gradually increasing difficulty in a given field.

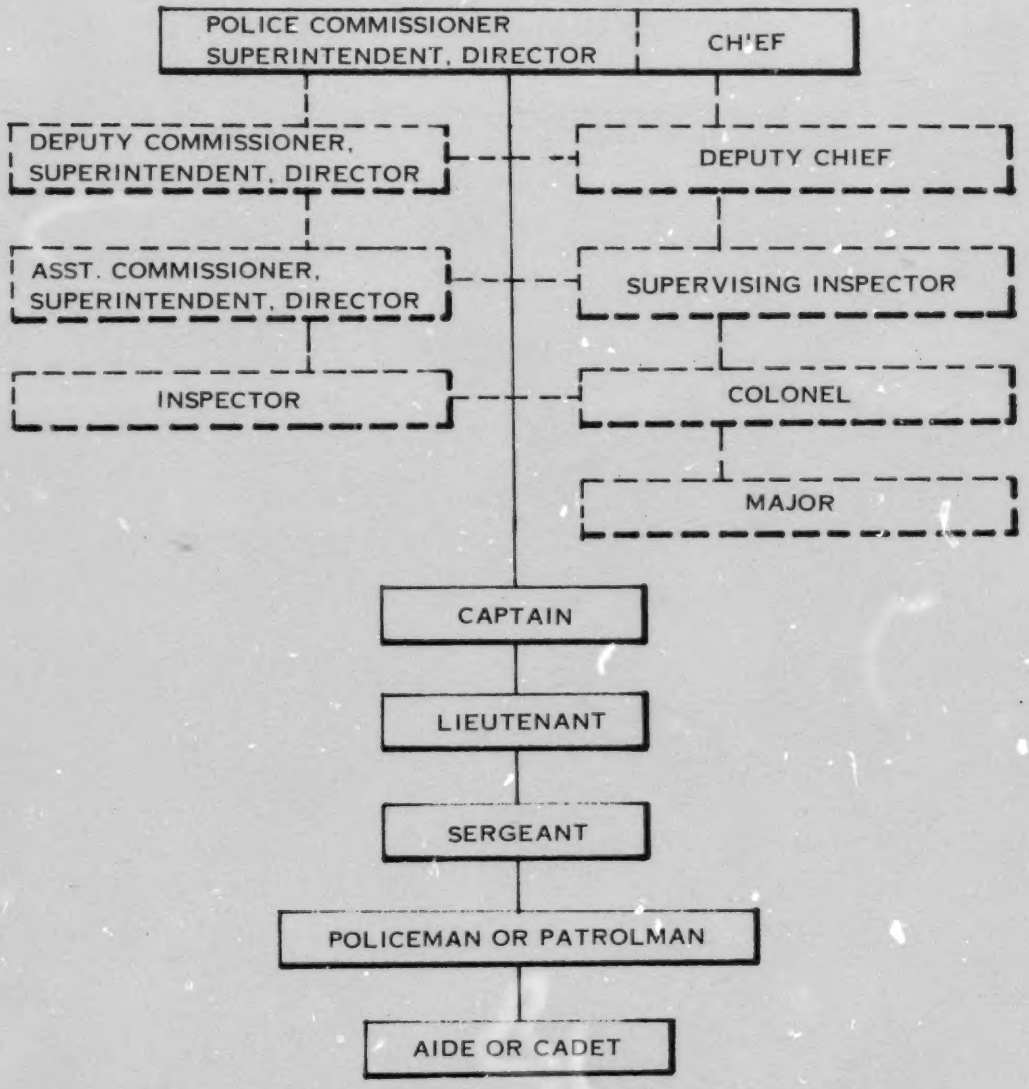

Figure 14 - Typical Career Lattice - Law Enforcement

and illustrates the presence of opportunities for upward mobility in the major job families. Structures of career lattices vary greatly with the organization and the location.

Law Enforcement. In law enforcement, the entry level job is Policeman or Patrolman (see Figure 14). However, this may be preceded by Policeman Aide or Patrolman Aide in some portions of the country. The next steps from the policeman are Sergeant, Lieutenant, Captain, Chief Police Inspector, Police Superintendent, Assistant Commissioner, Deputy Commissioner, and Police Commissioner.

Fire Protection. In fire protection, the entry level job is usually as a Firefighter, or as a Fire Dispatcher (see Figure 15). The Fire Dispatcher receives emergency alarms, dispatches proper equipment to the emergency, keeps records, and performs other duties. The next steps on the career lattice are: Fire Control Mechanic, Fire Control Technician, Engineer, Lieutenant, Captain, Battalion Chief, Assistant Chief, and Fire Chief.

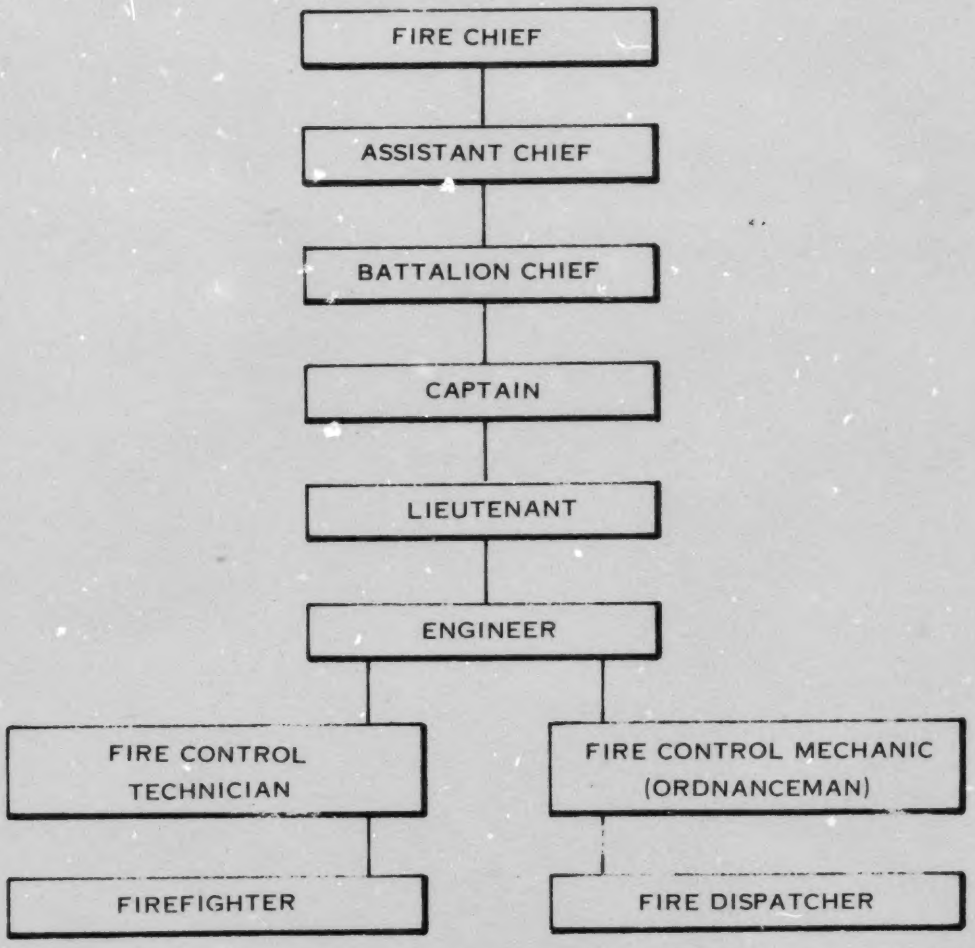

Figure 15 - Typical Career Lattice - Fire Protection

Courts. The courts usually include Civil, Criminal, Traffic, and Small Claims Divisions. The series of positions are similar, although the duties may vary with the different courts. The entry level position is clerk-typist (see Figure 16). The clerk-typist's duties in the civil court include filing

complaints, and following up on default cases. With more experience he may handle motions for new trials, and prepare law and motion calendars. In the criminal court, the clerk-typist may prepare calendars, and work in the misdemeanor courtroom on dispositions. The clerk-typist in the traffic court may take traffic fines, prepare abstracts of cases, or the court calendar, while in the small claims court he may handle the register of action. The position usually has several levels of clerk-typist.

The next position on the lattice would be supervisor of the clerk-typists, followed by deputy clerk at several levels, senior deputy clerk, and then the courtroom clerk. The Chief

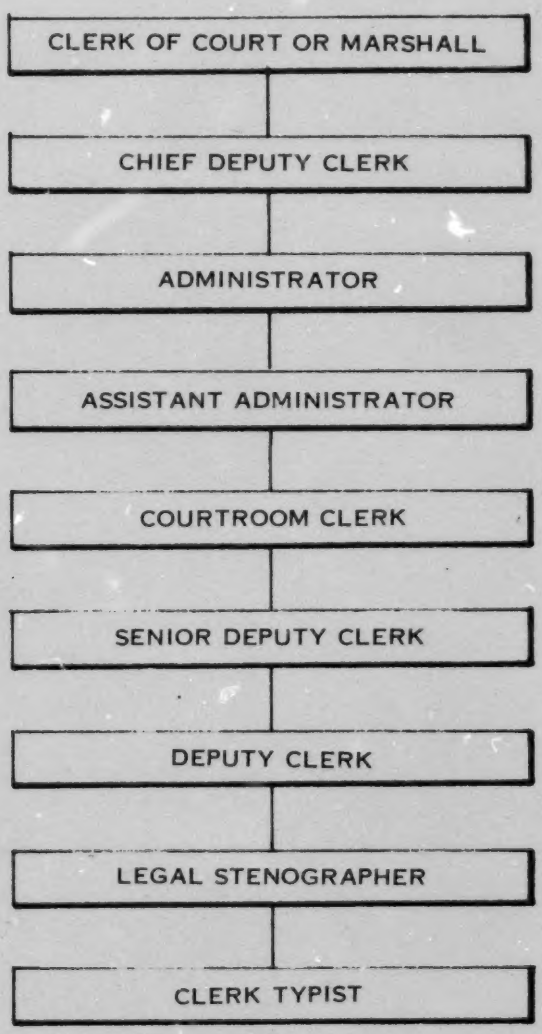

Figure 16 - Typical Career Lattice - Courts

Deputy Clerk is the next step on the lattice, then the Clerk of the Municipal Court. The court clerk works as a secretary for the judges, in which position he swears in witnesses, marks exhibits, prepares minutes of a trial, etc.

Legal secretaries take dictation, prepare calendars, and perform the duties for the judges. The Administrator and the Assistant Administrator of courts handle the setting for trials and other similar duties.

Career mobility is usually present in courts. For example, a clerk-typist I can become a courtroom clerk, Assistant Administrator, or Clerk of Court. It is also possible to become a judge, but additional specific education is necessary.

Probation. In the probation field, the first step is as Probation Counselor (see Figure 17). There are usually three levels of Counselor. This grade is followed by Probation Officer, Senior Officer, Assistant Supervisor, Supervisor, and Probation Director.

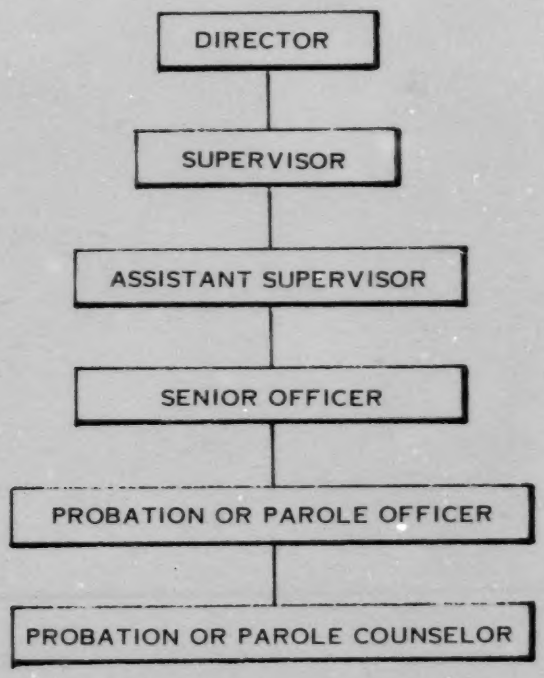

Figure 17 - Typical Career Lattice - Probation and Parole

Parole. The Parole Division is another section of the Department of Corrections. Here the career lattice would begin with

the Parole Agent who counsels parolees, helps them to understand their problems, and adapts the treatment program to the individual. This position extends to several levels. The next steps in the career are shown in Figure 17.

Corrections. A typical career lattice in the Corrections field may begin with Correctional Officer (see Figure 18), then progress to Sergeant, Lieutenant, Program Supervisor, Captain, Program Administrator, Associate Warden (State Prisons) or Superintendent (other institutions), Warden, Chief Deputy Director, and then, at the top, Director of Corrections. Workers in correctional institutions have support personnel working with them, including clerks, stenographers, and supervising clerks.

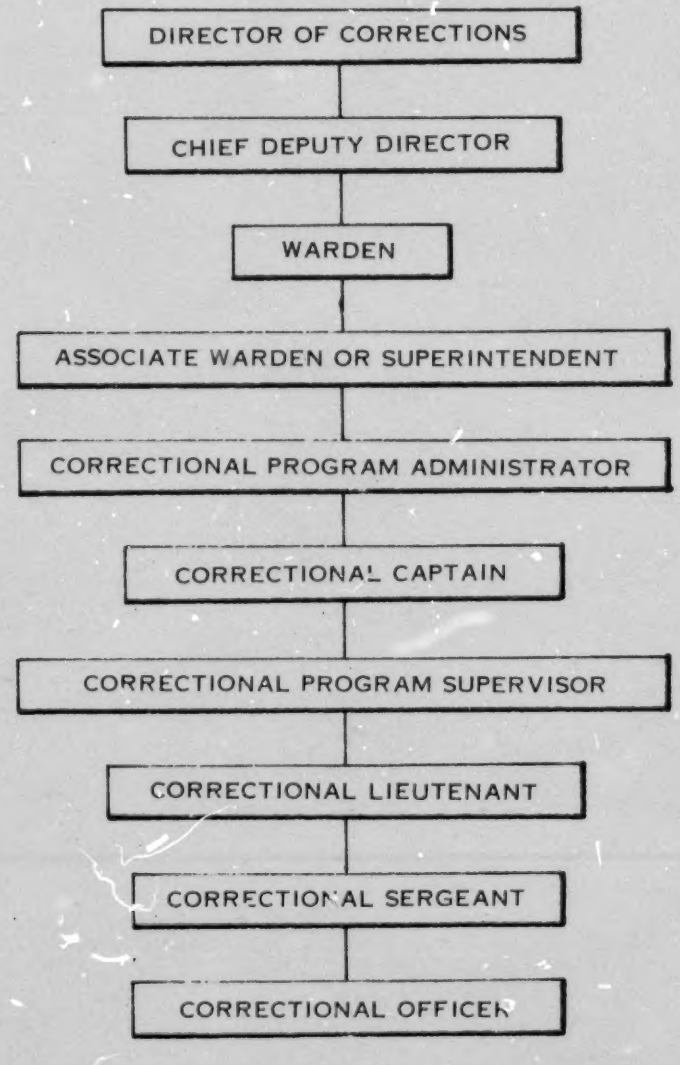

Figure 18 - Typical Career Lattice - Correctional Institutions

About 50% of tasks in corrections are delegated to the professional staff; psychologist, social workers, medical staff, vocational education teachers, and maintenance personnel.

STUDENT LEARNING ACTIVITIES

- View film, *Story of a Policeman*, and discuss with a police officer.
- List and describe at least one entry level job found in the following job families: police, fire, prison, and probation.
- Discuss with your peers or teacher the typical activities of each entry worker in public safety, corrections, and judicial services.
- Construct a typical public safety, corrections, and judicial services occupations career lattice for two of the following job families: police, fire, prisons, and probation to show the upward mobility of the career lattice.

TEACHER MANAGEMENT ACTIVITIES

- Arrange for a police officer to be a resource person in class.
- Have students discuss in small groups typical activities of each entry level job.
- Discuss public safety, corrections, and judicial services occupations career lattices for the six main job families, and discuss upward mobility in each.
- Direct students to prepare a file on career lattices and job descriptions in public safety, corrections, and judicial services career families.

RESOURCES

Your Career in Law Enforcement, Robert A. Liston, Pocket Books, 1965.

Opportunities in a Law Enforcement Career, James D. Stinchcomb, University Publishing, 1971.

Future in Law Enforcement and Related Fields, Flora R. Schrieber, Glasset and Dunlop, 1970.

Story of a Policeman, David L. Wolper Production, (Film, 25 min., black and white), 1971.

Law Enforcement Positions, ARCO Publishing Co., 1965.

Unit 7 Employment Prospects

INSTRUCTIONAL OBJECTIVES

1. Ability to identify at least four sources of information and statistics concerning employment outlook in public safety, corrections, and judicial services.

2. Ability to compare data dealing with the employment expectations of jobs in public safety, corrections, and judicial services with student's own job goals.

CONTENT

Employment Outlook. Population growth, increase in crime, slum conditions, and civil disorder: these are all factors which have resulted in a strong and steady demand for public safety, corrections, and judicial services workers. Various steps are being taken to recruit workers in these job families without lowering selection standards.

Law Enforcement. Many departments have established supporting classifications, such as Community Service Officer with the Police Department, and have assigned them to routine duties previously filled by law enforcement officers. Other similar examples in law enforcement include crossing guards, parking meter checkers, civilian jailers, and records and identification personnel. In many places the local county sheriff's department has set up a classification of Correctional Officer to maintain order and supervise the work of inmates in its detention institutions.

Since the number of registered motor vehicles operating on the highways in the country is great, the Department of Highway Patrol in each state will need to continue to expand its specialized positions and its crew of officers who patrol the highways in cars, motorcycles, and helicopters. Additional openings will occur because of replacement needs.

Fire protection services are expanding, especially in areas with a population increase. As existing fire departments expand and new areas incorporate or form fire districts, additional job opportunities are created. However, there is low turnover in this occupation. Since it takes three years to train a firefighter, most men become career employees, particularly since a firefighter's job is a job with a future that can lead to specialization in fire-alarm electronics, arson investigation, communication, or other fields linked to fire prevention and suppression.

The U.S. Forest Service normally hires seasonal firefighting employees during the summer season. Emergency temporary help is also hired to combat individual fires. The number of U.S. Forest Service regular openings may depend on legislative appropriations for reforestation programs, or on necessary control of fire disease and insect infestation, all of which vary from year to year. Additional mechanization (such as airplanes for dropping retardant solution on fires and possible use of helicopters) enables the size of the force to remain constant, and still have the capability to meet any increase in fire incidence that may result through increasing use of mountain recreation facilities.

Courts. Courts are expanding in administration responsibilities due both to the introduction of new management techniques and increased caseload; hence the demand for qualified persons, particularly in this field, usually far exceeds the supply.

Correctional Services. There is no surplus of qualified workers. With the phenomenal growth in population in many states, it has been hard to expand the state's correctional, probation, and parole machinery fast enough to keep pace with the need for these services. The correctional institutions in many states are full and court calendars are crowded. The need for correctional officers is great and is expanding.

Probation and Parole. Probation officers and parole agents have had to carry overlarge caseloads despite increases in staff. In some areas of the nation, the number of probation officers and parole agents has increased at about four times the rate of total employment in recent years. Growth is expected to be even faster owing to the recent federally enacted Probation Subsidy Bill, under which the states will subsidize counties for each probationer who does not enter an institution.

Probation activities have increased not only in heavy urban concentrations, but also in the fast-growing suburbia. Young couples and their children have moved into housing developments and suburban communities, often taking with them their own unsolved problems, while collecting new problems in an unfamiliar community. Consequently, such probation problems as child

neglect or abandonment, or juvenile delinquency, are increasingly found in suburban communities as well as in metropolitan areas.

Sources of Employment Information.

Law Enforcement. The State Employment Service, the local sheriff's and police departments, and the state police, all provide information about careers in law enforcement, especially police work. The State Employment Service usually administers aptitude tests on a daily basis for candidates interested in employment with the police department.

Firefighting. For information on firefighting positions, the local Fire Department should be contacted. County and city personnel offices also provide information relating to examinations, openings, and specific job requirements. Some fire departments advertise in newspapers for candidates for employment. For information about forest firefighters, inquire of the State Division of Forestry for openings with the state, and the Regional Forester of the U.S. Forest Service for federal openings.

Probation and Parole. The usual method of obtaining a job as a probation officer is to apply to the county or state civil service office. The applicant will be notified of the time to report for a written examination, and candidates who pass the written examination are later interviewed. For a job in the U.S. Probation Office the Chief Federal Probation Officer should be contacted. Federal appointments are made by the court on the recommendation of the Chief Probation Officer.

STUDENT LEARNING ACTIVITIES

- Study file of statistics and information on the expectations of jobs in public safety, corrections, and judicial services.
- Discuss with your peers career possibilities and requirements for employment as a policeman and firefighter in your local district.
- List the employment opportunities available in your own area in law enforcement and public safety.
- Discuss continuing education programs available locally to workers in public safety, corrections, and judicial services who want to improve their professional skills.
- Discuss and compare employment goals with the statistics and information on the expectations of jobs in public safety, corrections, and judicial services.

- Write a short summary of your employment goals.

TEACHER MANAGEMENT ACTIVITIES

- Lead discussion on career possibility and requirements for promotion of workers in local law enforcement and public safety agencies.
- Arrange for small group discussion on students' employment goals and a comparison of their goals with the employment outlook in public safety, corrections, and judicial services.
- Arrange for students to visit the local office of the state employment service and discuss the employment outlook for public safety, corrections, and judicial services.

RESOURCES

Occupational Outlook Handbook, U.S. Government Printing Office, Bulletin No. 1650, 1970-71.

Rationale for New Careers in the Administration of Criminal Justice, University Research Corporation, 1967.

New Careers: The Patrolman Aide: Trainee's Manual, Richardson White, Jr., and John H. Stein, University Research Corporation, 1968.

New Careers: The Patrolman Aide: Trainer's Manual, Richardson White, Jr., and John H. Stein, University Research Corporation, 1968.

Section 7

REGULATORY SERVICES AND RECORDS

Here are the contents of Section 7 of the Orientation Curriculum Guide. We suggest you read it before you read the text.

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Section 7

REGULATORY SERVICES AND RECORDS

Unit 1 Nature of the Field

INSTRUCTIONAL OBJECTIVES

1. Ability to describe the evolution of the concept of regulatory services and records.
2. Ability to list at least three reasons for regulatory services and records.
3. Ability to list the primary functions of regulatory services and records.

CONTENT

Reasons for Regulatory Services and Records. Services or products which are required and performed for the public need to have rates and regulations established. To avoid their establishment in an uncontrolled manner by the rise and fall of free market operations, the government regulates government activities, professions, public utilities, and monopolies. Congress has created major independent administrative or regulatory agencies which regulate or promote private industry for stated public purposes. Some of these agencies are responsible to the Congress, while others answer directly to the President. Government commissions have been formed, their objective being to determine rates and services; they thus provide regulatory services and records for government activities, public utilities and monopolies, and professions. Most of the commissions and agencies are at the federal and state levels, but some are at the local level.

The states were the first bodies which made laws that could give some assurance that the people would get true value for the dollars they spend. The first rules they made applied to owners of ferries, bridges, grist mills, and water companies. As industrialization spread, people moved from farms to cities and began to purchase more factory-made goods. These laws were then applied to interstate commerce, and became federal rules.

Consumer laws grew with the production and consumption of goods as the country became more industrialized. The first major federal consumer law was enacted in 1887 after the establishment of the Interstate Commerce Commission, to protect the people from overcharging by the railroads; the field of transportation being the start of industrialization, as well as government regulation of industry. As industrialization and urbanization grew, more federal laws were devised to protect the people, bringing with them more and more possible choices of services for the public at the lowest possible prices.

Professions, public utilities, and monopolies operate under stricter regulation than does private industry. Without such regulation, public utilities could charge exorbitant rates since they are monopolies. A general approach by the federal or state government is to allow the utilities to earn enough to get a "fair" return on a "fair" value of its property or their service.

Public utility companies or professional people have to obtain permission from the state commissions which regulate the respective standards of service before the utility can offer service to the public, or the person can practice his profession. The commissions examine and license the utilities and the professional people; carry out periodic inspections; and keep public records of licenses, examinations, and other pertinent information. The commission must approve or deny any extensions, reductions, or abandonments in the service the public utilities or professions render in any community or state.

The regulatory agencies see to it that service is offered without discrimination, in adequate amount and quality to meet the public need, serving all customers, giving the same types of services to identical users.

STUDENT LEARNING ACTIVITIES

- Discuss the reasons for regulatory services and records.
- Prepare at least four questions on the primary functions of regulatory services and records, and discuss these with resource people in the major job families.
- Write a short summary of the evolution of the concept of regulatory services and records.
- Discuss the effect of industrialization and urbanization on regulatory services and records.

TEACHER MANAGEMENT ACTIVITIES

- Collect from regulatory agencies, and make available to students, materials on regulatory services offered by the major regulatory agencies, including historical material on the evolution of these agencies.

- Organize students into small groups for discussion on the reasons for regulatory services and records and the evolution of the concept of regulatory services.

RESOURCES

The Regulators. Watchdog Agencies and the Public Interest, Louis M. Kohlmeier, Jr., Harper & Row, 1969.

The Politics of Regulation: A Reader, Houghton-Mifflin, 1964.

Government Regulation of Business: A Case Book, Prentice-Hall, 1965.

Unit 2 Regulatory Services and their Functions

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the major job families in regulatory services and records, and describe the nature of the work in each.

2. Ability to list at least four federal and state regulatory agencies, and describe their main function.

CONTENT

Major Job Families in the Field. The job families comprising the regulatory services and records occupational group include taxation, public records, inspection, examination, licenser, census, customs, and immigration.

Congress has given to more than 100 federal administrative agencies and offices the authority to write regulations which apply to private obligations and privileges. Most of the agencies are concerned with economic affairs. Some of the agencies and offices are part of the Executive Branch of the government, while others are more independent of the President and report directly to the Congress.

Executive Branch Agencies, Federal Government. The Executive Branch agencies and offices were formed by the departments for which they offer regulatory services. Many of the agencies impose taxes on their covered products or services, hold examinations in affected fields, carry out inspection of the various services or products to assure that they meet the prescribed standards, and issue licenses authorizing the production of the goods or rendering of the services. One agency takes the census of the country and keeps the records, while still another regulates the Customs Service and immigration to the country.

Department of Health, Education, and Welfare. This Department is responsible for the Food and Drug Administration agency, which was formed in 1931. It administers laws concerning purity, safety, and accurate labeling of certain foods and drugs.

Agriculture Department. This Department includes several regulatory agencies, including the Commodity Exchange Authority, formed in 1922, which regulates trading and pricing on commodity exchanges.

The Packers and Stockyards Administration was formed in 1916 to regulate fair business practices in livestock and meat marketing.

Interior Department. The Oil Import Administration agency was formed in 1959, and regulates the importation of crude oil, fuel oil, and petroleum productions into the country.

Justice Department. The Immigration and Naturalization Service is the agency of the U.S. Department of Justice responsible for administering the immigration and nationality laws of the United States. Its officers are on duty throughout the United States and at stations in Europe, Bermuda, Nassau, Puerto Rico, Canada, Mexico, and the Phillippines. They perform a great variety of duties, which include conducting investigations, detecting violations of the law, and determining whether aliens may enter or remain in the United States. They prevent illegal entrance of aliens into the United States, and make recommendations to the courts in such matters as petitions for citizenship. They collect and evaluate evidence, adjudicate applications for benefits such as petitions for visas, and preside over and present the government's case at hearings.

Treasury Department. The regulatory agencies in the Treasury Department include the office of Comptroller of the Currency which was formed in 1863. The agency regulates and supervises all national banks.

The Internal Revenue Service was formed in 1862, to administer federal income, alcohol, tobacco, and other tax programs. The IRS collects 95% of the total federal revenue, making possible social, scientific, economic, military, foreign and domestic federal activities; national defense, space and missile development, health, and conservation programs.

The Customs Service of the Treasury Department is a big and growing business. In one recent year alone, Customs officials were challenged to examine, appraise, and evaluate new materials and manufactured foods, and collected over three and a half million dollars. The primary function of the Customs Service is the assessment and collection of import duties and taxes; the control of carriers, persons, and articles

entering or departing the United States, to insure compliance with laws and regulations; and the performance of valuable services for other government agencies which regulate international traffic and trade.

The Customs Service also performs important controls for other agencies, such as: Department of Agriculture (animals, meat, and plant products); Food and Drug Administration (food, drugs, and pesticides); Bureau of Census (statistics); Bureau of Foreign Commerce (export control); Fish and Wildlife Service (migratory birds); Internal Revenue Service (collection of certain taxes); Bureau of Narcotics (control of importation, and cooperation in law enforcement).

The U.S. Coast Guard was formed in the Treasury Department in 1915, to regulate the seaworthiness of vessels, and to license merchant marine personnel. It also maintains sea search and rescue services, and aids to navigation. It is a Division of the Treasury Department in peacetime, and an arm of the U.S. Navy in wartime.

Transportation Department. This Department includes several regulatory agencies. The Federal Aviation Administration (which was formed in 1958) certifies the airworthiness of aircraft, examines and licenses pilots, and operates the air traffic control system.

The Federal Highway Administration and the Federal Railroad Administration were both formed in 1966. The Highway Administration administers highway safety programs and includes the Bureau of Public Roads, which administers highway construction programs. The Railroad Administration regulates highspeed railroad development programs, and the railroad and oil pipeline safety program.

Commerce Department. The Department of Commerce conducts many regulatory activities and is divided into many Bureaus. It fosters, promotes, and develops foreign and domestic commerce, the manufacturing and shipping industries, and transportation facilities of the United States, with the exception of those facets of transportation now under the Department of Transportation or the Interstate Commerce Commission, the Federal Maritime Commission, etc. The activities performed are varied, and include taking census; collection, analysis, and dissemination of commercial statistics; coastal and geodetic surveys; issuance of patents and registration of trademarks; weather forecasts; administration of certain aid programs to redevelopment areas and the Civil Rights Act of 1964; processing of scientific and technical data; developing American merchant marine; and other activities related to commerce.

Independent Agencies, Federal Government. Some of the major

regulatory agencies are more independent of the President and report directly to the Congress. These agencies include, among others, *The Civil Aeronautics Board*, formed in 1938, with major responsibilities in regulation of airline passenger fares and freight rates.

The Atomic Energy Commission, formed in 1946, regulates civilian use of atomic energy.

The Federal Communications Commission, formed in 1934, regulates fares, rates, and practices of those steamship companies involved in U.S. foreign commerce.

The Federal Power Commission, formed in 1930, regulates rates and practices in interstate sale at wholesale of electronic energy, and regulates the transportation and sale of natural gas.

The Federal Trade Commission was formed in 1914, to regulate certain antitrust statutes, as well as laws concerning advertising misrepresentation, flammable fabrics, and the packaging and labeling of certain products.

The Interstate Commerce Commission, formed in 1887, is the oldest federal regulatory agency. Although the ICC at first reported to the Department of Interior, it now reports directly to Congress. It is responsible for regulating the American interstate transportation system in the public interest. Its duties include the regulation of rates, fares, and practices of railroads, truck and bus lines, oil pipelines, domestic water carriers, and freight forwarders.

The National Labor Relations Board, formed in 1935, conducts union representation elections, and regulates unfair labor practices of employers and unions.

The Securities and Exchange Commission was formed in 1934. It regulates the rates and practices of stock exchanges and the over-the-counter securities dealers, and also certain practices of mutual funds, investment advisers, and public utility holding companies.

The Tax Court of the United States was formed in 1924. It adjudicates cases involving deficiencies or overpayment in income, estate, and certain other federal tax matters. It also regulates settlement of certain classes of such controversies.

The United States Tariff Commission, formed in 1916, investigates tariffs and certain other foreign trade matters.

Federal Agencies Working in States. Each state has branches of the above agencies, as well as other regulatory agencies at the state level.

Agriculture Department. The Department of Agriculture has several regulatory bureaus in each state. The Bureau of Meat Inspection enforces the provisions of the Agricultural Code pertaining to the preparation, processing, manufacturing, and selling of meat and meat food products, with general inspection responsibilities in these areas. The Bureau also enforces prohibitions against false or deceptive labeling of meat and meat food products.

The Bureau of Weights and Measures and County Sealers of Weights and Measures of the Department of Agriculture is responsible for enforcement of laws regulating weights and measures. Broadly stated, the responsibility of the Bureau and the Sealers is to ensure that weights and measures and all commercial weighing and measuring devices (such as scales, gasoline pumps, electric meters, and odometers) are correct, conform to state standards, and are honestly used, and that packages and labels of consumer goods are free of deception or misrepresentations, and accurately state the quantity of contents.

U.S. Postal Services. Each state has branches of the U.S. Postal Inspection Service, which operates under many different statutes embodied in the U.S. Code relating to unlawful use of mails. The provisions of law most closely connected to unfair or fraudulent consumer practices related to mailing of lottery tickets or related matter, frauds, swindles, the use of fictitious names or addresses, and the mailing of firearms or injurious articles. The Post Office has the authority to return to senders any mail addressed to persons engaged in false or fraudulent mail schemes.

Federal Trade Commission. This commission sponsors local law enforcement agencies, such as Consumer Protection Coordinating Committees, in many states. The overall purpose of these committees is to achieve more well coordinated law enforcement among governmental agencies in the field of consumer and investor protection.

The Commission has the authority in each state to identify and halt unfair or deceptive trade practices, and unfair methods of competition in interstate commerce. This authority extends not only to halting false, misleading, and deceptive advertising, but any commercial practice or method of marketing which is substantially unfair or deceptive to the consumer, or which constitutes an unfair method of competition. The Commission has special authority to police advertising of food, drugs, medical devices, and cosmetics.

The Commission also enforces the Flammable Fabrics Act, which condemns the manufacture for sale or resale of dangerously flammable wearing apparel.

The Fair Packaging and Labeling Act, also enforced by the Commission, establishes regulations for the labeling of consumer commodities, and establishes specific requirements and prohibitions concerning the labeling and packaging of such commodities.

The Commission is also responsible for enforcement of the Wool, Fur, and Textile Fiber Products Labeling and Identification Acts, which prohibit the misbranding, mislabeling, or false or deceptive advertising or invoicing of the identified products.

State Agencies

Consumer Affairs. Several states have Departments of Consumer Affairs with regional offices. These Departments typically consist of many licensing and regulating agencies, examining thousands of licensure applicants each year. There are approximately 500 occupation-oriented professional and vocational associations. The regulatory agencies are usually categorized as: Healing Arts; Fiduciary; Design and Construction; Business; Sanitation; and the Division of Consumer Services, which is made up of regulatory bureaus, with specialized responsibilities in the field of consumer services.

The objectives of the Department of Consumer Affairs are to promote and safeguard the interests of the consumer in the marketplace; to protect the public health, general welfare, and safety by licensing only persons and firms of demonstrated knowledge and abilities to perform services for the public; and to discipline those licensees who fail in their public trust.

Corporations. Most states have a Department of Corporations which administers a wide variety of statutes regulating commercial development. Its principal authority is in the field of investor protection.

Insurance. The Department of Insurance has broad supervisory and regulatory powers over the insurance industry in the state. It is the agency responsible for licensing and regulating all insurance companies and insurance producers (agents, brokers, solicitors) in the state.

Motor Vehicles. Each state has a Department of Motor Vehicles. This department has broad responsibilities for regulating the sale, registration, use, and operation of motor vehicles in the state. Much of its activity is specifically oriented toward protecting the consumer as a purchaser and user of motor

vehicles, particularly automobiles. The Department deals with occupational licensing and regulation of vehicle dealers, salesmen, manufacturers, transporters, dismantling, and driving schools in accordance with specific statutory requirements.

Another regulatory activity performed by the Department is the enforcement of the Automobile Sales Finance Act. This act sets out the terms to be included in a conditional sales contract, limits the amount of interest chargeable on the unpaid balance of a financed automobile purchase, and regulates other aspects of financed automobile sales.

The Department usually also assists in the enforcement of the forgery and grand theft provisions of that particular state's Penal Code, in which a motor vehicle or motor vehicle documentation is involved.

Public Health. Each state has a Department of Public Health with Bureaus of Food and Drug Control, located in the major cities of that state. The general responsibility of the Bureau is to enforce state laws relating to the adulteration, misbranding or false advertising of foods, drugs, therapeutic devices, cosmetics, and hazardous household chemicals. The Bureau's responsibilities generally relate mainly to processed foods rather than to raw agricultural products.

In addition to these broad statutes, the Department of Public Health enforces a variety of laws designed to protect the public from the harmful effects of unsanitary conditions in the processing, canning, storage, and marketing of food. It thus enforces The Retail Food Production and Marketing Establishment Law, which establishes statewide sanitation standards for retail food production and marketing establishments; it enforces laws and regulations governing the sanitation of food manufacturing establishments.

Usually, each state has a Restaurant Act which prescribes sanitation standards for restaurants; a Bakery Sanitation Law; laws relating to cold storage of foods, frozen food locker plants, and cannery inspection; and other specialized provisions relating to the processing, preparation, or packaging of particular food products.

The Bureau also enforces special laws and regulations relating to the diagnosis and treatment of cancer. Among other important provisions, these laws prohibit the treatment of cancer by drugs, surgery, or radiation by persons who do not hold a state license for this service, and also prohibits the sale, gift, prescription, or administration of any drug or device to be used in the diagnosis or treatment of cancer unless this has been approved by the Bureau.

Real Estate. Each state usually has a Department of Real Estate with many regional branches. This Department licenses and regulates all real estate brokers and salesmen. The most important facet of the Department's jurisdiction includes the policing of false advertising in offers of real property for sale or lease; and regulating the activities of real estate agents, to prevent misrepresentations, misleading promises, fraudulent or negligent inducements, incompetence, and dishonest dealing in real estate transactions.

The Department also regulates the negotiation of loans secured by real property liens; licensees of mineral, oil, and gas property; the sale of real estate syndicate security interests where less than 100 owners are involved; and it also prescribes the form of contract and/or advertising in advance fee transactions and advance fee rental operations.

Public Utilities. The Public Utilities Commission is an important regulatory agency in each state. It is responsible for the regulation of intrastate rates and services of privately-owned gas, electric, telephone, water, and steam heat utilities; railroads, buses, trucks, airlines, and vessels transporting freight or passengers; warehousemen; wharf owners or managers; carloaders; and pipeline operators.

While the major portion of the Commission's efforts are directed toward rate and certificate regulation of the utilities, it has jurisdiction to consider virtually any complaint concerning the operations of the companies it regulates. Some of the industries subject to the Commission's jurisdiction include common carriers, such as cement carriers, express corporations, passenger stage corporations, petroleum contract or irregular route carriers; railroads, street railroads, vessels, and passenger air carriers; electric, gas, and water companies; pipelines; telegraph and telephone companies; toll bridges; warehousemen; and wharf owners and managers.

The Commission also regulates household foods carriers, cement contract carriers, charter-party passenger carriers, dump truck carriers, vessels for hire, highway contract carriers, and sewer system corporations.

The Public Utilities Commission determines whether rates charged by public utility companies are just, reasonable, and nondiscriminatory, and it regulates the services and facilities provided by such utilities. It also establishes safety standards for equipment and facilities.

STUDENT LEARNING ACTIVITIES

- List the major job families and compare the predominant concerns and duties in each group.

- Write a short summary of the occupational group stating the main functions of each job family.
- List at least four federal and four state regulatory agencies and describe their main functions.
- Compare the responsibilities of the agencies which are part of the Executive Branch of the government with the responsibilities of those which are more independent and report directly to the Congress.

TEACHER MANAGEMENT ACTIVITIES

- Arrange for visit by resource people from regulatory agencies in your town.
- Arrange field trips to local regulatory agencies and have students discuss some of the major duties of workers in those agencies.
- Have students collect materials and information on the primary functions and duties of workers in this occupational group. Help students display materials and information, and share with their peers.

RESOURCES

The Federal Tax System, Tax Foundation, 1968.

A New Dimension in Taxation, U.S. Internal Revenue Service, 1970.

Taxes: Their Source and Usage, Progressive Pictures, (Film, 11 min., black and white), 1963.

Reports of the Immigration Commission, Arno Press, 1969.

Economics of Regulation. Theory and Practice in the Transportation and Public Utility Industries, Irwin-Dorsey, 1969.

Tedrow's Regulation of Transportation, Fair-Guandols, Wm. C. Brown Company Publishers, 1969.

Unit 3 Functions and Duties of Workers

INSTRUCTIONAL OBJECTIVES

1. Ability to describe the major duties performed by workers in regulatory services and records.

2. Ability to compare and contrast the general duties of workers in regulatory services and records.

3. Ability to make a list of the typical jobs in regulatory services and records, and describe the duties performed in at least six of the jobs.

CONTENT

Functions and Duties of Workers. This unit contains brief descriptions of the major functions and duties of workers in the field of regulatory services and records. Some of these descriptions are rather narrowly confined to one area of work, but, where it is feasible to do so, one or two descriptions are written to cover a general area encompassing several related positions in federal, state, and local government.

Because of the size and complexity of regulatory operations and programs, the administrative problems involved in their management and control are tremendous. Executives, therefore, require the help of administrative assistants in the management phases of their work. The assistant is typically concerned with providing assistance to management in budgetary and fiscal areas, personnel, correspondence, organization, procedure, supply, or records. Many of the regulatory agencies conduct management-internship programs to train and develop employees for administrative work.

Accountants. The government depends heavily on trained accountants for assistance in managing its varied activities and in

carrying out its contracting and regulatory functions. Accountants design, install, and operate the government's accounting systems. They may also analyze and interpret data, perform internal audit of agency operations, and audit government contractors and recipients of grants-in-aid. Some accountants prescribe accounting systems under regulatory programs and analyze accounting reports submitted by regulated companies.

Taxation Job Family

Tax Specialists - Internal Revenue Service. IRS employees conduct investigations to assure an equitable tax system, and enforce laws against those who would defraud the government. Revenue officers call on all types of taxpayers, examine records, obtain and analyze information regarding business situations, and negotiate arrangements to satisfy taxpayer obligations.

Internal Revenue Agents examine and audit accounting books and records to determine correct federal tax liabilities.

Office of International Operations - Revenue Service Representative. A very experienced revenue agent may also serve abroad in the Office of International Operations as a Revenue Service Representative or assistant, on temporary rotation assignments of four or six months, auditing, examining, and investigating foreign entities, individuals, and corporations operating within the United States. He determines sources of taxable income (foreign and domestic) under existing laws, treaties, and rulings. He conducts field examination throughout the United States and foreign countries, and may be assigned for as long as six months to temporary duties at established foreign posts to assist in bringing peak loads under control. He may also conduct appropriate investigations, and gather evidence for possible use in criminal or civil prosecutions with international aspects.

Special Agents in the IRS investigate tax fraud and other related criminal violations. They document, evaluate, and organize evidence, and report on their findings.

Internal Security Inspectors maintain the security of the IRS. Their duties include investigations of IRS employees for extortion, bribery, fraud, embezzlement, and theft.

Internal Auditors work with the inspection service inside IRS, and evaluate the service operations. The Internal Revenue Agent audits the case, whereas the Internal Auditor audits the performance of that duty.

Tax Auditors contact taxpayers to identify and explain tax issues and determine correct tax liabilities.

Accounting Technicians are junior accountants who perform the clerical part of accounting in the IRS Service Centers and sometimes assist the accountants in less professional work.

Estate tax attorneys make field examinations of federal estate and gift returns. They determine the value, ownership of interests, and taxability of estates and gifts.

Collection Revenue Officers collect the delinquent taxes in a professional manner, with the power to seize property. They are assisted by Revenue Representatives who occupy a junior position in the field of collection. In addition to assisting with the collection of delinquent taxes, they also advise and assist the public on questions of collection.

Administrative Specialists have duties ranging from recruitment, employee development, and budget formulation, to direct contacts with information media.

Other positions with the IRS include Tax Law Specialist, Estate Tax Examiner, and Competent Authority Analyst.

Tax Specialists at State Level

Tax Examiners at the state level examine incoming tax returns, propose additional assessments, and make refunds where proper.

Auditors also work for the State Revenue Agencies. They assist in field audits of individuals, business organizations, or state agencies subject to state taxation or regulations. They also prepare audit reports, and may be assigned responsibility for particular sections or phases of an audit. In the office, they examine tax returns and financial statements for completeness and proper application of the law. They also correspond with taxpayers, and prepare schedules to show changes in tax liability.

Legal Counsel is an entry level position with the State Revenue Agencies. A Legal Counsel studies, interprets, and applies laws, court decisions, and other legal authorities in the preparation of cases, drafts legislative measures and regulations, and does a wide variety of research.

A Programmer Trainee translates problem statements and detailed flow charts into computer code and operating instructions, assists in preparing flow charts on complex problems, programs simple problems for computer input, tests coded computer programs, and makes revisions to eliminate errors and inefficient use of computer time.

Public Records Job Family

Most of the duties performed in this field are clerical. They include keeping detailed records of the vital statistics of the residents of the state; recording births, deaths, marriages, etc.; and performing filing duties as filing clerks. Clerical positions are usually at several levels and are supervised by administrative personnel.

Inspection Job Family

The duties of workers in Inspection are to inspect and investigate the enforcement of laws and regulations in some particular field. Although the fields in which inspectors work are diverse, their actual duties are very similar. For example:

A *Food and Drug Inspector* makes inspections and investigations of establishments and of the manufacturing, producing, packing, labeling, and distribution of food, alcoholic beverages, drugs, cosmetics, and hazardous substances.

A *Dairy Foods Inspector* in the Department of Agriculture performs field inspection and enforcement work involved in the administration of the provisions of the Agricultural Code pertaining to quality control of milk and milk products. He visits dairies, milk plants, factories, restaurants, and other places of business to inspect the registration and use of dairy containers and cabinets. He makes sanitary inspections of dairy farms and plants; gathers evidence, and assists in the prosecution of violators of dairy laws. He may also participate in hearings on the revocation of licenses and permits, and may also develop and introduce improved dairy methods.

A *Building Inspector* inspects buildings being constructed, altered, or repaired for compliance with building laws. He examines plans and specifications of buildings for conformity with zoning regulations; inspects damaged buildings, and reports need for repairs or demolition; investigates alleged violations of codes, and issues orders for correction of such violations as noncompliance with plans, specifications, and codes.

Examination Job Family

The function and duties of workers in examination vary with the field of examination. For example, the duties of workers in some of the larger fields include, in addition to the tax examiners discussed above:

The *Insurance Examiner*, who checks the financial status of insurance companies to assure their compliance with applicable

laws and regulations. He inspects records, prepares trial balances, audits financial statements, and reviews claim and policy files.

The *Bank Examiner* participates in the examination of the financial condition of banks and trust companies, and reviews their accounting methods and audit controls.

The *Corporation Examiner* performs technical and administrative duties to assure compliance with provisions of various laws under the jurisdiction of the Department of Corporations relating to regulation of corporations, personal property brokers, industrial loan companies, credit unions, escrow agents, and check sellers and cashiers. They conduct and supervise the examination of books and records of financial institutions and other business firms.

The *Drivers License Examiner* examines applicants and makes recommendations as to the issuance of drivers licenses. He also gives information to the public, and does other work as required.

The *Claims Examiner* performs work involved in developing, examining, adjusting, reconsidering, or authorizing the settlement of claims involving disability, death, land, government checks, passport applications, retirement and old-age insurance, veterans' and unemployment compensation.

The *Hearing Examiner* presides at formal hearings required by statute. He administers oaths and affirmations, issues subpoenas authorized by law, holds prehearing conferences for the settlement or simplification of the issues, questions witnesses, and performs other similar duties.

The *Labor-Management Relations Examiner* is the initial contact for parties concerned about a labor relations question. He conducts hearings on alleged unfair labor practices, and supervises elections to choose representatives for collective bargaining purposes. He gathers facts pertaining to his cases, evaluates them objectively, and determines proper remedies.

The *Bank and Savings and Loan Examiner* assembles information essential to the appraisal and classification of assets, verifies cash on hand, prepares bank reconcilements, verifies and lists bonds and securities, makes test audits, and prepares schedules of earnings and expenses. In this position the examiner generally travels extensively.

Licenser Job Family

In the Licenser job family, the major function of workers is

to license persons and businesses, and to regulate licensees and register them. For example, the licensers at the State Board of Pharmacy administer and enforce applicable statutes and regulations pertaining to the handling and distribution of drugs and devices in accordance with provisions of the Pharmacy Law; they also regulate and control the handling and distribution of dangerous and restricted drugs and devices, poisons, hypodermics, etc. The duties of licensers include administering examinations to license applicants, checking licensure requirements for the specific field, issuing the original license and duplicate certificate, and license renewals. A licenser interviewer or licenser generally works for one particular agency, such as the State Board of Pharmacy, State Board of Nursing Education and Nurse Registration, State Board of Registration for Professional Engineers, State Board of Barber Examiners, Cemetery Board, State Board of Architectural Examiners, and so on.

Census Job Family

The duties of workers in the Bureau of The Census are primarily census taking, which involves making surveys and actual counts of people living in each town, city, and state. The Bureau of The Census employs a large clerical staff, including filing clerks, clerk-typists, and other additional staff.

Customs Service and Job Family

Customs Inspectors are the government's front-line protection against smuggling and illegal importation and exportation of merchandise. They inspect cargo, baggage, mail, and articles worn or carried by persons and carriers entering or leaving the United States. The work of the inspector requires continual contact with the traveling public, importers, crew members, and carrier employees. The Customs Inspector works at major international airports, ships, and piers, or wherever there is importation of cargo and the processing of passengers returning from foreign ports.

Import Specialists examine import entry documents, classify merchandise under Tariff Schedules of the United States, and accurately determine the appraised unit value of merchandise. Further responsibilities of these specialists include the careful analysis of all documents and supporting papers relating to import, and the accurate determination of duties applicable and taxes due. Customs aides perform essentially the same duties as Import Specialists, except that they deal with entries worth under $200. Customs Agents conduct investigations relating to the prevention and detection of fraud through undervaluation of merchandise, smuggling of merchandise and contra-

band into or out of the United States, and other Customs matters. Customs Agents work together with other Treasury enforcement agents to enforce laws that come under their jurisdictions. Agents are found in every state, on the high seas, and in many countries abroad.

Immigration and Naturalization Service and Job Family

The *Border Patrol Agent* (formerly known as Importer Patrol Inspector) is the entry-level position in the Border Patrol of the Immigration and Naturalization Service. This is a mobile uniformed enforcement organization. Its principal purpose is to prevent the smuggling and illegal entry of aliens into the United States, and to detect, apprehend, and initiate departure of aliens illegally in this country. Border Patrol Agents are generally assigned along international boundaries and coastal areas, but at times to areas within the country. Border Patrol Agents patrol areas to apprehend persons seen crossing the border; stop vehicles on highways to check citizenship of the occupants; inspect and search trains, buses, airplanes, ships, and terminals to detect aliens entering illegally; and perform many other duties to enforce the immigration law. They cooperate with other enforcement agencies of the government in the prevention of smuggling of contraband into the United States.

Experience in the Border Patrol is necessary to advance to other positions in the Service, such as Importer Inspector or Inspectress, and Investigator.

An *Immigration Inspector* inspects persons seeking admission or readmission to, or the privilege of passing through, or residing in, the United States. Some immigration inspectors also effect the arrest, detention, control, supervision, parole, or deportation of aliens subject to deportation or exclusion. Inspectors may be required to board land, sea, and air conveyances for the purpose of inspecting or questioning persons arriving in or departing from the United States. In some ports, they may be subject to call at all hours of the night in order to inspect incoming vessels arriving unexpectedly or off schedule.

An *Immigration Investigator* performs duties similar to the Immigration Inspector, with the exception that where Immigration Inspector positions are located at international borders, seaports, and airports of entry into the United States, the Investigator positions are located at the numerous offices of the Service in almost every state.

STUDENT LEARNING ACTIVITIES

- Visit local Internal Revenue Service office and observe the typical duties performed by agents, examiners, and analysts. Write a short summary on activities observed on field trip.

- Question a Food and Drug Inspector, Building Inspector, Bank Examiner, Drivers License Examiner, or Tax Examiner, about his duties.

- Discuss in small groups the functions and duties of workers in customs, immigration, census, and licensure.

- Prepare short talk on the positions in customs, immigration, and inspection, comparing and contrasting the duties performed by workers in those job families. Repeat activity, using other job families in Regulatory Services and Records.

TEACHER MANAGEMENT ACTIVITIES

- Invite speakers from the various job families or arrange for students to visit the agencies and talk to workers.

- Organize students into small groups for discussion on function and duties of workers.

- Arrange a display of information on Regulatory Services and Records.

RESOURCES

Your Place in Space As a Professional Auditor, U.S. Air Force Auditor General, 1967.

Auditors - A Professional Career, U.S. Defense Contract Audit Agency, 1968.

Internal Auditor, U.S. Internal Revenue Service, 1970.

Revenue Agent, U.S. Internal Revenue Service, 1970.

Revenue Officer, U.S. Internal Revenue Service, 1970.

The Internal Revenue Aide, U.S. Internal Revenue Service, 1969.

The Tax Auditor, U.S. Internal Revenue Service, 1970.

Treasury Enforcement Agent, The Treasury College Recruitment Coordinator for Law Enforcement, 1970.

FDA Inspector, U.S. Food and Drug Administration, 1969.

License Inspector, ARCO Publishing, 1965.

Unit 4 Recommended Qualifications of Workers

INSTRUCTIONAL OBJECTIVES

1. Ability to discuss the recommended qualifications of workers in regulatory services and records.

2. Ability to evaluate his own qualifications and compare them with the qualifications required for entry-level jobs.

CONTENT

Regulatory agencies operate a great variety of interesting and challenging programs that require many different skills. Many positions in regulatory services require college education; however, not all do so. For most positions background knowledge, or a satisfactory combination of education and experience, is accepted in lieu of the educational requirements.

Taxation Job Family - Internal Revenue Service (IRS).

Almost every major college field of study has some application to the work of the Internal Revenue Service. The majority of positions can best be filled by students who have completed majors in Accounting, Business Administration, and Law. However, hundreds of positions are filled each year by young college men and women who major in Political Science, Public Administration, Education, Liberal Arts, and other fields. A college degree is desirable; however, college seniors, especially those who have taken accounting courses, are encouraged to apply.

Tax Auditors require graduation from college with specialization in accounting. They should be able to conduct audits or financial examinations of accounts and records, analyze data and draw sound conclusions, prepare clear and concise reports, and speak and write effectively.

The Estate Tax Attorney requires an L.L.B. or J.D. degree.

A legal counsel must have graduated from law school and must be a member of the Bar Association of his state. He must know legal research methods, legal principles, and their application. He should have the ability to analyze, appraise, and apply legal principles, facts, and precedents; present statements of fact, law, and argument clearly and logically in written and oral form; draft statutes; and dictate correspondence involving the explanation of legal matters.

A Computer Programmer Trainee must have an associate-of-arts degree in data processing. However, further training in computer science or data processing at a four-year collegiate level institution are highly desirable. A programmer trainee should have the ability to develop electronic computer routines; analyze data and draw logical conclusions; speak and write effectively; and prepare clear, complete, and concise reports.

Public Records Job Family.

The qualifications for clerks in Public Records generally include a high school diploma, and knowledge of typing. For administrative positions, some college education is generally required, and often a degree in business administration is desirable.

Inspection Job Family.

Graduation from college is generally one of the requirements for an inspector.

A Food and Drug Inspection Trainee has requirements which include an education equivalent to graduation from college with courses in bacteriology, biology, chemistry, food technology, pharmacology, pharmacy, sanitation, sanitary engineering, or other biological or chemical sciences. It is desirable to have knowledge of current public health and sanitation problems in the production and distribution of foods and drugs, alcoholic beverages, and related products. Special personal characteristics often include aptitude for food and drug inspection and investigation work, and capacity for development.

A Dairy Foods Inspector needs to graduate from college with specialization in studies relating to dairy farm or milk and milk products. The skills needed include a wide knowledge of dairy production, dairy products manufacturing methods, and milk equipment and materials. Knowledge of methods of testing and grading dairy products, and the principles of environmental sanitation, are generally also required.

Examination Job Family.

Special requirements for examiners generally include college-level education in accounting, banking, finance, business administration, economics, or appropriate experience. The examiner should have a wide knowledge of general accounting principles and procedures, and a general knowledge of business law. He should be able to analyze data and draw sound conclusions, and speak and write effectively.

Tax Examiners usually require no experience or education. Applicants are required to pass a written test which measures their ability to learn the job.

The Hearing Examiner must have been duly licensed and authorized to practice as an attorney for a period of at least seven years.

Licenser Job Family.

The qualifications for licenser include thorough knowledge of the particular field in which he will work, the ability to prepare and administer examinations, and to inspect the work and qualifications of applicants for licenses and renewals.

Census Job Family.

For a Census Taker, the qualifications include a high school diploma and some college education. Workers in this field need to have the ability to communicate with people, be tolerant of people and situations, follow instructions, and be able to write logical and succinct reports.

Customs Job Family.

A Customs Inspector needs four years of college study in any major field. The minimum age is 21. A good physical condition, to meet the rigorous demands of the job; the ability to deal satisfactorily with the public; and a combination of toughness and diplomacy; these are valued assets. Because the inspector is involved in varied situations, initiative and sound judgment for on-the-spot decision-making are essential.

An Import Specialist must have four years of college study, and proven reliability because he makes reports on violations of trademark, copyright, or marketing laws, and must be ready to defend the government's position in all litigation resulting from these actions. The complex assignments for import specialists demand a natural ability to assimilate specialized

knowledge, and to meet and deal effectively with people in order to secure their cooperation in complying with technical requirements.

The Customs Aide position requires two years of college study or an AA/AS Degree, and qualifications similar to Import Specialist.

Immigration and Naturalization Service and Job Family.

Applicants for positions in Immigration and Naturalization must be 21 years of age. There is no maximum age limit. All applicants must take a competitive written and oral examination designed to measure verbal abilities and judgment. An automobile driver's license and United States citizenship are required. Applicants must be in sound physical condition and be of good muscular development. They must have good vision and hearing.

STUDENT LEARNING ACTIVITIES

- Study and discuss recommended qualifications of workers in Regulatory Services and Records.
- Prepare a series of questions to ask the resource people in your class from various local regulatory agencies.
- Analyze your own qualifications and compare them with the recommended qualifications for Regulatory Services and Records workers.
- Visit regulatory agencies and obtain information about examinations and current employment opportunities.

TEACHER MANAGEMENT ACTIVITIES

- Divide students into small groups and initiate discussion of qualifications required in each job family and comparison of students' own qualifications.
- Prepare a file on qualifications and other requirements for Regulatory Services and Records and make available to students.
- Collect pamphlets and other employment literature from the Civil Service Commission and state and local regulatory agencies, and make them available to students.
- Invite representatives of the Civil Service Commission and regulatory agencies to visit class and act as resource person.
- Organize field trip to local regulatory agencies and obtain information concerning current employment opportunities and open examinations.

RESOURCES

Career Gateways, Employment Information Center, 1970.

Graduate Into Government, U.S. Department of Agriculture, 1968.

Unit 5 Career Lattices and Employment Prospects

INSTRUCTIONAL OBJECTIVES

1. Ability to identify at least four sources of information concerning employment prospects in regulatory services and records.

2. Ability to identify entry-level jobs in regulatory services and records.

3. Ability to describe and contrast the typical entry-level jobs for workers in the seven major job families.

4. Ability to construct a typical career lattice for at least three of the major job families.

5. Ability to compare employment expectations of jobs in regulatory services and records with his own job goals.

CONTENT

Career Opportunities. The occupational field of regulatory services and records offers a great variety of career opportunities. For example: jobs for administrative assistants are numerous and varied in the administration of the regulatory agencies. Administrative positions exist in all government regulatory agencies, and opportunities for advancement are excellent for persons who demonstrate the ability to perform administrative duties effectively. Participation in an agency's management-internship program is a good method of embarking on a full management career.

Accountants. There are over 19,000 professional accounting positions scattered throughout the government, many of these in regulatory services and records. New appointees are given systematic training and supervised on-the-job assignments comparable to those given in "junior" positions in large public accounting firms. Well-qualified individuals have a good

chance to move up to higher levels of accounting, auditing, and related areas of controllership. Major employers of accountants and auditors are the Internal Revenue Service, the Board of Equalization, the Department of Human Resources Development, the Bureau of Budget, the General Accounting Office, and the Department of Defense.

Taxation Job Family - Internal Revenue Service

The Internal Revenue Service (IRS) has more than 60,000 employees, and is by far the largest organization in the Treasury Department. Each year millions of personal income tax returns, and thousands of franchise and corporation income tax returns, are filed with the Internal Revenue Service in each state. The IRS is a decentralized organization and its employees are employed in offices, large and small, throughout the United States.

The IRS is divided into three separate broad career fields: Federal Law Enforcement, Accounting, and Collection.

The Federal Law Enforcement positions include special agents in intelligence, and internal security inspectors.

The area of Accounting includes Internal Revenue Agents, Internal Auditors, Tax Auditors, Accounting Technicians, and Estate Tax Attorneys.

In Collection, the positions include Revenue Officers, Taxpayer Service Representatives, and Revenue Representatives.

The regional IRS service centers employ Tax Examiners, Data Transcribers, and Tax Specialist Clerks.

The U.S. Treasury Department also directs a Bureau of Alcohol, Tobacco, and Firearms, which was a part of IRS until July, 1972. This Bureau employs Special Investigators, and Alcohol and Tobacco Tax Inspectors.

Inservice Training. During their first year, professional employees in the Internal Revenue Service are given at least six weeks of formal training, which includes a postgraduate course in taxation taught by authorities in their fields. Beyond this, advanced training and work of progressively greater responsibility are linked together in well-defined career development programs. Carefully integrated training is provided in career lattices to supervisory, mid-management, and executive positions. Opportunities for advancement are good. Supervisory and management positions and higher levels are usually filled under an informal merit promotion program.

Career Advancement. Workers in the positions indicated above may be considered for positions at higher levels, if they can qualify on the basis of experience and demonstrated competence. Opportunities are also available for promotion to higher positions for workers who have completed the requested number of semester hours of study in related subjects. This training may be acquired after appointment through resident study, or by completion of correspondence courses which are available to IRS employees.

Legal Counsel. In addition to the foregoing, the position of Legal Counsel is also an entry-level job in the Internal Revenue Service. Besides the Internal Revenue Service, major employers of legal counsels are Boards of Equalization, State Compensation Insurance Funds, Legislative Counsel Bureaus, Public Utilities Commissions, Departments of Alcoholic Beverage Control, and others.

Public Records Job Family

In the Public Records field, employment opportunities are mostly in the clerical area. There are generally a number of levels of clerical positions through which one can advance, as he attains more experience on the job. Advancement is possible into the administrative positions. In most states this is a comparatively small department; hence, the employment opportunities are not as extensive as in some other job families.

Inspection Job Family

Employment prospects in the Inspection Services are very good. Substantial growth in the inspection occupations is quite likely during the next five to ten years, particularly in those inspection activities which relate to housing and urban renewal programs. The career ladder in Inspection usually begins with the Inspector Trainee, the next step being the Inspector, followed by Senior Inspector. For example:

Building Inspector. In Building Inspection the entry-level job would be Building Inspector Trainee, then Building Inspector, and finally Senior Building Inspector. This career lattice is based on the use of the Building Inspector as a generalist inspector, who performs a variety of inspectional services in accordance with various codes.

Specialization in the plumbing, electrical, or other specific areas often occurs at the senior level. Some states are so set up that the position of Building Inspector Trainee can lead to specialized positions in plumbing, electrical, and housing inspection, as well as code enforcement in urban

renewal and neighborhood conservation projects. This progression generally depends on the level of education attained by the trainee. In some highly specialized inspection departments, there are separate career lattices, with trainee positions in plumbing inspection, housing inspection, electrical inspection, plan checking, and depending on how local government functions are organized, public works construction inspection.

Examination Job Family

Examiners are employed by federal and state agencies as well as by private groups, hence their employment prospects are good. Opportunities for advancement are generally excellent, as are opportunities for training and promotion to other jobs. There are several levels of examiners in most fields. The entry-level job is often Auditor I. For example:

Corporation Examiner. For Corporation Examiner a typical career lattice may begin with Auditor I, then Corporation Examiner II and III, Supervising Corporation Examiner I and II, and then Chief Corporation Examiner. The Corporation Examiner receives from $9,000-$11,000 at the entry-level, and reaches $17,000-$21,000 per year as Chief Corporation Examiner.

Bank Examiner. Bank Examiner I is the entry-level position for college graduates interested in a career in bank supervision. Bank Examiner II is the next step in the career lattice. The salary range for an entry level job as Bank Examiner, and also for Savings and Loan Examiner is between $9,000 and $11,000, and increases with experience and rank.

Drivers License Examiner. The Drivers License Examiner receives between $8,000 and $10,000 per year.

Insurance Examiner. The Insurance Examiners receive between $8,000 and $10,000 per year.

Hearing Examiner. The salary range for Hearing Examiner is between $23,000 and $34,000 per year.

Licenser Job Family

The licenser job family is an evergrowing field, wherein more people are needed as the Departments of Consumer Affairs and the State Boards in the various professions and occupations expand. The entry-level job is usually license interviewer, then licenser, and then supervisor and director.

Census Job Family

Since census is generally taken every ten years, the work for many Census Takers is either temporary or periodical. During the years when the census is not being taken, the regional offices of the Bureau of the Census employ a very small staff. The employment prospects are good, but not as extensive as in some other job families. Many of the jobs are clerical. The Census Taker is usually the entry-level job into the field. This is followed by administrative staff positions, such as Supervisor, Assistant Director, and Director.

Customs Service

In addition to the rapid growth in trade and tourism, the Customs Service is constantly required to adjust to the technological and procedural changes of the private industries served by them. For example, the jumbo aircraft of the 1970's, carrying almost 300 passengers, necessitate new methods and facilities to process large numbers of people in a short period of time. To accomplish this task and to meet the demands of tomorrow, the Service needs more well-trained and resourceful men and women - young people with fresh ideas who accept the challenges of a modern industrial society.

The entry-level positions for the Customs Service is as a Customs Aide (which may also be true in the United States Treasury Department). The next step in the career lattice may be Import Specialist, then Customs Inspector, followed by supervisorial and executive positions. Other supportive positions include Personnel Specialist, Management Analysis Specialist, Legal Assistant, Port Investigator, Chemist, Accountant, Auditor, and secretaries and typists.

Immigration and Naturalization Service and Job Family

The Immigration and Naturalization Service offers very good employment prospects. The Service keeps all officers currently informed about the requirements for supervisory, management, and executive positions so that they may know the opportunities for advancement, and be aware of the experience they must gain in order to prepare for promotion. Advancement is based on merit. Vacancies from the "journeyman" level up to executive levels are filled by the promotion of officers who have demonstrated career capacity for advancement. The Immigration and Naturalization Service has developed an Officer Selection Board System to insure that each vacancy, throughout the Service, is filled by the best qualified officer available.

The Service has an employee development program designed to

assist employees in the performance of their work and to enable them to prepare for advancement. "Know how" is furnished to employees through organized training. This includes training on the job, attendance at service schools, and correspondence lessons. It is accompanied by changes in work assignments and posts of duty to enable officers to gain new and varied experience, and to use their "know how" to advantage.

Border Patrol Agent. The entry level job is as Border Patrol Agent. This may lead to other positions such as Immigration Inspector and Investigator, then to supervisory and executive positions.

The basic entrance salary for a Border Patrol Agent is about $8,000 per year. With progression to the higher level journeyman positions of Border Patrol Agent, the salary raises to $9,000 and then $10,000 per year. As they gain additional experience, officers become qualified for promotion to supervisory positions in the Border Patrol, and for other positions in other activities of the Service, even to executive levels. The opportunities for advancement are excellent, as are opportunities for training and promotion to other jobs.

The salary range for entry level positions in Customs is about $8,000 to $9,000 per year. With experience, a Customs Aide may advance to Customs Inspector or Investigator, at which time the salary would increase to about $12,000, and, with further experience and promotion, to even higher levels.

STUDENT LEARNING ACTIVITIES

- Study file on statistics and information on the expectations of jobs in Regulatory Services and Records.
- Write a short comparison on employment expectations of jobs in Regulatory Services and Records.
- List the employment opportunities available in your own area in inspection, taxation, and examination.
- Discuss advancement opportunities available in at least three of the major job families.
- List and describe one entry-level job found in each major job family.
- Construct a typical regulatory services and records occupations career lattice for at least four of the job families.
- Discuss the typical activities of each entry worker in regulatory services and records.

- Become an "aide" for a day to an officer in Inspection, Examination, Customs, or Immigration, and make a short summary and evaluation of your experience.

TEACHER MANAGEMENT ACTIVITIES

- Prepare and make available to students file on statistics and information on jobs in Regulatory Services and Records.
- Arrange for students to become an "aide" for a day in Inspection, Examination, Customs, or Immigration.
- Arrange for a tax examiner, customs inspector, and a drivers license examiner to be resource people in class.
- Have students discuss in small groups typical activities of each entry-level job.
- Have students prepare a file on career lattices and job descriptions in regulatory services and records.

RESOURCES

An Auditing Career, U.S. Defense Contract Audit Agency, 1968.

Your Auditing Career, U.S. Army Audit Agency, 1970.

Career Opportunities in Poultry and Meat Inspection, U.S. Department of Agriculture, 1969.

Career Opportunities in Consumer and Marketing, U.S. Department of Agriculture, 1969.

Careers in the U.S. Department of Commerce, U.S. Employment Information Center, 1970.

A Career in Bank Supervision, U.S. Federal Deposit Insurance Corporation, 1968.

Career Opportunities, U.S. Interstate Commerce Commission, 1969.

The Road to Your Success, U.S. Federal Highway Administration, 1970.

Careers in the U.S. Department of Interior, U.S. Department of Interior, 1971.

Careers With the Immigration and Naturalization Service, U.S. Immigration and Naturalization Service, 1970.

Section 8

TRANSPORTATION SERVICES

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Section 8

TRANSPORTATION SERVICES

Unit 1 Nature of the Field

INSTRUCTIONAL OBJECTIVES

1. Ability to describe transportation management in terms of its major goals and purposes.
2. Ability to identify the major transportation systems for which transportation managers are responsible.
3. Ability to discuss the major challenges confronting transportation managers.
4. Ability to list at least four reasons why national transportation policies and procedures are necessary.

CONTENT

Transportation Management. The field of transportation management has to do with society's attempt to find answers to such questions as:

- What will happen if we don't have uniform traffic signs, roads, or procedures for our traffic control?
- Suppose we have more automobiles than our roads can handle?
- What if they made an unsafe car?

Transportation management is concerned with reducing the hazards and inefficiencies of congestion in surface and air passenger cargo flow systems. Usually such work is done by the federal government, but some aspects may be performed by state agencies.

The provision of transportation management is the response of the federal government to a realization that someone must

assume the responsibility for coordination and policies of various transportation systems.

Transportation agencies offer "indirect" services, such as advice or guidelines; they also provide policy and rigid regulations. Actually, the two types of services are seldom entirely separate. For example, organizations or state agencies often need considerable advice as to the need for construction of new highway systems. In addition, they require clear specifications or policies concerning road construction, signs, etc., to ensure that the roads, when built, will be compatible with roads of other states.

Background. As early as 1805, Albert Gallatin (then U.S. Secretary of the Treasury) proposed establishment of a federal transportation agency. While there were then no automobiles, airplanes, or even bicycles, the complications of public travel were already a national headache.

The idea surfaced in Congress regularly, but inconclusively, from 1874 until 1966. Meanwhile, land, air, and sea transportation developed independently, with only casual interrelationships. In 1966 Congress acted, creating for the first time one department to oversee all transportation activities in the nation.

Goals of Transportation Management. Whether at the state or federal level, transportation management has similar purposes. These may be stated as the needs to:

- Develop state and national transportation policies and programs conducive to the provision of fast, safe, efficient, and convenient transportation at the lowest cost consistent therewith and with other national objectives, including the efficient utilization and conservation of the Nation's resources;

- Assure the coordinated, effective administration of the transportation programs of the federal and state governments;

- Facilitate the development and improvement of coordinated transportation service to be provided by private enterprise to the maximum extent feasible;

- Encourage cooperation of federal, state, and local governments; carriers; labor; and other interested parties toward the achievement of national transportation objectives;

- Stimulate technological advances in transportation;

- Provide general leadership in identification and solution of transportation problems;

- Develop and recommend to appropriate legislative bodies for approval state and national transportation policies and programs to accomplish these objectives with full and appropriate consideration of the needs of the public, users, carriers, industry, labor, and the national defense.

The Challenge for Transportation Management. The vitality of the nation - its productivity, progress, and protection - rests in large measure upon its transportation system.

In a recent year, rail, truck, pipeline, waterway, and air carriers moved approximately 1 trillion, 750 billion ton-miles of intercity freight. Private and public carriers totaled at least 120 billion passenger-miles in intercity travel. And, within the cities, all that traffic merged with millions of daily commuter trips to fray tempers, clog streets, and create new parking problems.

Between 1970 and 1980, the total capacity of the transportation system must double if demand continues at its current rate.

Requirements. To repeat in ten years the accomplishment of three centuries is challenge enough. Yet that is an understatement of the total problem. Traditionally, the federal government has directed its efforts and expenditures primarily toward national situations, leaving city problems for local solution. The growing rural-to-urban trend predicts that by 1975 more than 75% of an estimated population of 230 million will be concentrated in urban areas - with about 150 million people living and working in three metropolitan corridors. Transportation in the cities has become a national problem, and most cities are asking for help. Not just the increased need for mobility in areas where land is at a premium, but air pollution; noise; traffic congestion; destruction of neighborhoods by freeways; inadequate transport for the underprivileged, the aged, and the handicapped; frustrating, and costly delays in transfer between modes of passengers, baggage, and cargo; and improved safety; all cry for priority handling.

Safety Needs. Throughout the transportation system, accidents are taking a costly toll. On our highways alone, over 1,000 people are killed each week, and 10,000 are injured every day. In addition, economic losses exceed one billion dollars a month. And Americans are buying automobiles at the rate of about 10 million a year.

Future Needs. Tremendous tasks and challenges confront transportation managers in public service, and these must be solved

in the near future: development of a coordinated transportation system responsive to the economic, social, political, and defense needs of the Nation - with improved safety on all segments; sponsorship of accelerated research and development to meet the challenge ahead; a new approach to transportation in the cities as a service of all the people living there; facilitation of the movement of people and goods between modes; and doubling the transport capacity without adversely affecting the environment or destroying natural resources.

Intermodal Transportation. As the volume of personnel and goods transported increases, and the time permitted for transportation decreases, the problems of the shipper and individual traveler become more complex, especially when they must use more than one transportation system between origin and destination.

Development. Some companies have begun to provide shipper-to-receiver service utilizing more than one transportation system. The Railway Express Agency was an early pioneer in this field; transferring them to railroad cars, transporting them to the destination city, and, finally, delivering at the destination by wagon.

This early door-to-door service expanded: first to truck freight lines; then as the highways became more crowded, truck-trailers picked up the goods; and trailers were loaded on railroad cars for movement to another city, unloaded, and connected to another truck and driven to the receiver. Finally, the trailers were built with trailers with removable wheel assemblies, so that only the trailer box with its load is now carried on the train.

Steamship lines, plagued with damage and loss of cargo and delays in loading, adopted the truck-trailer system and eventually developed ships designed for this type of cargo. The truck-rail-ship systems moved toward Intermodal Transportation - the efficient and safe movement of people and goods from origin to destination on more than one mode of transportation.

Airlines are also concerned with door-to-door delivery of people. In Washington, D.C., Dulles Field provides mobile lounges to move people from the flight line to the terminal, reducing walking to a few steps. Seattle, Washington, provides baggage transporters in the parking garage to permit the passenger to go directly to the parking place and thus reduce congestion at the terminal entrance. Cleveland, Ohio, connected its airport terminal to the downtown center with a system of high speed elevated trains, and Los Angeles is investigating a system which would pick up passengers by bus, and then transport the bus to the airport by helicopter.

Future Trends. All of this interchange of work between the transportation systems is leading to more interchange of personnel, and evaluation of the Intermodal Transportation System as the system of the future. As this system evolves, experience in jobs in one of today's transportation systems will become more readily transferable to another system, with employment fields falling into such categories as: Data Management, Distribution, Environmental, Maintenance, Management, Marketing, Passenger, Regulatory, Safety, and Systems Planning Services.

STUDENT LEARNING ACTIVITIES

- Discuss how each of the transportation systems affects daily life in your community.
- View films *Transportation Today*, and *Transportation In the Modern World*.
- Prepare a list of local and state agencies or organizations which are involved in transportation management.
- Discuss the relationship and function of transportation managers at the federal level with the transportation industry.

TEACHER MANAGEMENT ACTIVITIES

- Discuss with students questions similar to the following:

  Why do we require coordinated policies and standards in transportation?

  Who should be responsible for transportation management?

  Why is transportation management such a problem?
- Arrange for speaker from a local or state transportation management agency to present an overview of the agency's work.
- Obtain and make available to students books, brochures, etc., concerning the field of transportation management.

RESOURCES

Occupational Outlook Handbook, Department of Labor, Bureau of Labor Statistics, U.S. Government Printing Office, 1972-73.

Transportation Today, Coronet Films, (Filmstrip, 50 frames, color), 1970.

Transportation in the Modern World, Coronet Films, (Film, 11 min., Black and White or color), 1970.

You Can Work in the Transportation Industry, Betty Warner Dietz, John Day Co., 1969.

U.S. Transportation Systems, Denoyer-Geppert, (Map), 1969.

Transportation and You, Rand McNally, 1965.

Systems Work Together, Coronet Films, (Sound, Filmstrip, 50 frames, color), 1970.

Transportation, Where Do We Go From Here?, Guidance Associates, (Film, 19 min., color discussion guide), 1972.

Unit 2 Management, Organization, and Role of Major Transportation Agencies

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the major federal departments and/or agencies concerned with transportation management and regulation.

2. Ability to describe the role of selected departments and/or agencies in the area of transportation management of interest to him.

CONTENT

Federal Involvement. In one of the most complex reorganizations attempted in federal government, the Department of Transportation (DOT) in 1967 brought under one administrative roof some 100,000 people from more than 30 governmental units. The organization of DOT is unique in that several operating administrations are assigned responsibility for specific modal operations, serving all four major modes of transportation.

Federal Aviation Administration (FAA)

Air traffic control is a major function of FAA, involving nearly half of the agency's 50,000-plus employees. These highly-trained specialists staff 27 air route traffic control centers, 335 airport control towers, and 350 flight service stations in the United States and its possessions.

Maintaining the radars, communications, equipment, ground navigation aids, and other elements of the system requires an additional 10,000 technicians and engineers.

In order to keep pace with the rapid growth of aviation, FAA is presently implementing a computer-based semi-automated air traffic control system at all of the enroute centers serving the domestic United States and at all major terminal facilities.

Personnel and Plane Capabilities. FAA's responsibilities in the air safety area are not confined solely to air traffic control. The agency also must pass on the competence of every pilot, and the airworthiness of every aircraft. This involves monitoring the day-to-day activities of some 720,000 pilots and 133,000 aircraft.

The agency's involvement in aircraft certification begins with the approval of the initial blueprints and specifications. Extensive ground and flight tests follow. When these are successfully completed, the agency issues a Type Certificate indicating that the aircraft has met all FAA standards of construction and performance. Following this, the Production Certificate attests to the manufacturer's ability to duplicate the type design. Then, every aircraft that rolls off the assembly line must earn its own individual Certificate of Airworthiness.

Once an aircraft starts flying, FAA is concerned with its operational safety - who is qualified to do maintenance work, and where and how it is done. FAA establishes airline maintenance programs and certificates repair stations that perform the required periodic checks on general aviation (i.e., private) aircraft.

In addition to pilots, this organization certificates aviation mechanics, parachute riggers, ground instructors, aircraft dispatchers, flight navigators and engineers, and air traffic controllers. Flight, ground, and mechanic schools must also be approved by the agency.

Landing Facilities. FAA also fosters the construction and improvement of civil landing facilities under a new program authorized by the Airport and Airways Development Act of 1970. Signed into law by President Nixon on May 21, 1970, the Act will raise an estimated $11.5 billion during the decade of the 1970's through new and higher taxes on airspace users. The money will be funneled into a special aviation trust fund to be available for airport and airways development projects, and for the operation and maintenance of the system.

Environmental Protection. Another important FAA concern is the protection of the environment. The agency has already adopted regulations setting maximum noise limits for the new generation of wide-body aircraft, which are significantly below those for previous large jets. Similar rule making is in progress that would be applicable to the current jet fleet, future supersonic transports, and vertical and short takeoff and landing (V/STOL) aircraft. In addition, FAA has initiated regulatory action to limit aircraft engine emission, and is party to an agreement with the U.S. airlines whereby they have agreed to place smoke reduction devices on short-haul jets now in service.

Security. The FAA is also responsible for air transportation security, and has initiated an aggressive program to combat the menace of aerial piracy. Other activities include the operation of National and Dulles airports serving the Nation's Capital, as well as the operations of one of the world's largest technical training centers at Oklahoma City.

Research and Development. The FAA supports all its activities with extensive research and development efforts, much of which is done at the agency's National Aviation Facilities Experimental Center (NAFEC) in Atlantic City, New Jersey, and at the new DOT Transportation Systems Center in Cambridge, Massachusetts. Flight safety in the Jet Age is a very demanding job, and the problems already resolved are only an introduction to the challenges that lie ahead.

Federal Highway Administration (FHWA). Under our federal system of government, the primary responsibility for planning, designing, building, maintaining, and operating the publicly-owned highway facilities lies with the various states and their local subdivisions. Because of the national interest in highway improvement, the federal government has, since 1916, assisted the states through a cooperative roadbuilding partnership.

The federal-aid highway network comprises some 900,000 miles of primary and secondary routes and their urban extensions. It covers only one-fourth of all the road and street mileage in the nation, yet carries over two-thirds of all the traffic. The program is administered by the Federal Highway Administration successor agency to the long-established Bureau of Public Roads (BPR). Federal funds derive from highway user taxes.

A vital part of the primary system is the National System of Interstate and Defense Highways, the largest civilian public works project in history. Begun in 1956, it is scheduled for completion in the late 1970's. This 42,500-mile nationwide network of controlled access freeways will carry 20% of the country's traffic - and statisticians figure that when it is completed more than 1.8 million man-years of labor will have gone into its construction.

Interstate highways are providing the motorist with faster, safer, more efficient, and more comfortable travel. Comparison with the safety records of older roads indicates that the completed system will save 8,000 to 8,500 lives a year.

Urban Systems. The Federal-aid Highway Act of 1970 authorized a new federal-aid urban system. This gives local governmental units help in financing construction of the major streets and

highways required to carry bus, truck, and auto traffic in our cities and suburbs.

Auxiliary Goals. The social and environmental effects (as well as the economic aspects) of highway improvements receive constant consideration.

The 1970 Act authorizes a program to train the disadvantaged and bring them into the job market as skilled highway construction employees. It reactivates the highway beautification program and places new emphasis on billboard and junkyard control. It sets environmental protection guidelines to supplement ongoing programs within DOT and the states. And it strengthens the existing requirement that federal-aid funds will not be made available for any highway improvement until proper replacement housing is assured.

Coordination in Planning. Highway improvements are coordinated with intermodal transportation planning (as discussed in Unit 1), and resources of the highway program are available to assist public transportation through preferential treatment for buses during rush hours on urban freeways, and through construction of fringe parking facilities and bus loading areas. Traffic operations improvements increase the capacity and safety of urban streets, thereby reducing the need for new construction in built-up areas.

Planning requirements are also designed to ensure that highway improvements contribute to achieving community goals and are compatible with planned land use development. Multiple use of highway rights-of-way is encouraged, so that a highway project can be the means of meeting other community needs - for parking, recreational, commercial, or even housing facilities.

Highway Safety. The FHWA and the states carry on continuous highway safety campaigns - to engineer more safety into the highways themselves, to correct accident-prone locations and dangerous railroad grade crossings, to replace potentially unsafe bridges, to eliminate roadside hazards by such innovations as breakaway sign supports and lamp standards, and to improve highway lighting.

FHWA's Bureau of Motor Carrier Safety has jurisdiction over the safety performance of some 125,000 motor carriers engaged in interstate or foreign commerce. Its field forces check on driver qualifications and their hours of service on the road, analyze accident reports, make carrier and vehicle inspections, control the movement of dangerous cargoes such as explosives, and conduct demonstration clinics on safety.

National Highway Traffic Safety Administration (NHTSA). While

the Federal Highway Administration is responsible for safety of the highways, the balance of the program - safety of vehicles, drivers, passengers, pedestrians - comes under the new National Highway Traffic Safety Administration.

Its mandate - to reduce highway fatalities and injuries - stems from the National Traffic and Motor Vehicle Safety Act and the Highway Safety Act, both passed by Congress in 1966. Results of this legislation, which also established the NHSB, have been impressive. For the five preceding years the average annual increase in highway deaths was 6.8 percent. For 1967, 1968, and 1969, the average annual increase hovered around 2.1 percent. But the tremendous increase in miles driven kept the actual casualties mounting. In 1969 highway accidents cost 56,400 lives, more than 2 1/2 million injuries, and over $12 billion in economic losses.

Operational Programs. The safety Administration operates through four principal channels:

- Highway Safety Program Standards - for adoption by the individual states and local communities - setting performance level programs in such areas as motor vehicle inspection, driver education, driver licensing, motor vehicle registration, alcohol countermeasures, traffic codes and laws, emergency medical services, and other programs dealing with the driver and highway traffic.

- More than 30 Vehicle Safety Performance Standards - imposing minimum performance requirements for vehicle components vital to safety on all manufacturers of motor vehicles and vehicle equipment supplying the United States market, regardless of country of manufacture. These cover such items as seat belts, collapsible steering columns, brakes, and tires.

- Public education programs - to help people help themselves to stay alive on the highways.

- A research program which, combined with a continual study of accident data, forms a basis for issuance of new or revised standards.

The Safety Administration exercises strong regulatory powers and this authority encourages compliance with its standards both by the states and the manufacturers. As a safeguard, all new state safety standards must be submitted to Congress for approval 90 days before they are put into law.

Auxiliary Programs. Three programs with high priority in the early 1970's cover crash survivability, alcohol countermeasures, and experimental safety vehicles.

- *The Crash Survivability Program* is a scientifically-based effort to develop vehicles that will protect occupants from death or serious injury through the range of the most frequent crash speeds. Experience has shown, for instance, that seat belts and shoulder restraints will save lives and reduce injury. But, unfortunately, too many people won't bother to use them. This program includes evaluation of such passive restraints as air bags, self-fastening belts, and crash-deployed nets or blankets - devices that will automatically absorb crash forces and protect occupants from injury.

- *The Alcohol Countermeasures Program* recognizes that half the highway deaths each year are caused by excessive consumption of alcohol by drivers and pedestrians. The Safety Administration has underway a comprehensive program to inform the general public, and to guide and assist the states and local communities in dealing with the problem drinker who drives.

- *The Experimental Safety Vehicle Program* relates to the development of experimental safety vehicles. These laboratories on wheels are being designed to meet tough safety criteria. They will be put through a testing program to give the government fundamental research data on which to base more effective vehicle standards in the future - standards that should eventually give us cars that will permit occupants to walk away from crashes at 50 miles per hour, and rollovers at 70 miles per hour. Since imports also have to meet our federal standards, Germany, Japan, and other countries are developing similar smaller experimental safety vehicles under cooperative international agreements with this country.

Federal Railroad Administration (FRA). The average consumer little realizes how dependent he is upon railroad service. Railroads carry three-fourths of all coal, a source not only of heat but of power. In addition to such other bulk and raw materials as ore and grain, their traffic includes:

- 46% of meat and dairy products
- 74% of canned and frozen foods
- 71% of household appliances
- 76% of automobiles and automobile parts
- 78% of lumber and wood
- 40% of furniture
- 63% of chemicals
- 68% of primary metal products, and
- 86% of pulp and paper.

Yet the percentage of total traffic hauled by the railroads

has been declining in recent years, and many companies are experiencing serious financial difficulties.

During the 1960's the number of passenger trains in service in the United States declined from 1,500 to fewer than 400. In general, the quality of service suffered an even more serious setback as railroads, struggling to stay solvent, tried to phase out unprofitable passenger operations. Yet experiments such as the Metroliner service between New York and Washington indicated that the public definitely wanted modern rail service.

Goals. Reflecting these statistics, the Federal Railroad Administration has, as part of its work, to help identify the role of railroad freight and passenger service in a balanced transportation system, and to assist in the evolution of government policies and programs appropriate to that role.

The FRA is looking for answers to longstanding, industrywide problems through such channels as major research effort into the perennial problems of freight car shortages; establishment of two task forces of rail labor and management to provide a continuing forum through which they can work together to solve key internal problems; a 5-year program to reduce grade crossing accidents; active sponsorship of legislation such as the Rail Passenger Service Act and the Federal Railroad Safety Act of 1970 directed toward specific problem areas.

The National Rail Passenger Service Act of 1970 provided for establishment of a basic rail passenger system run by a COMSAT-type corporation that will devote its efforts solely to providing optimal passenger service. This will give Americans and foreign tourists a chance to show whether they really will use passenger train service. It also permits participating railroads to concentrate more of their available resources on improved freight operations.

The Rail Safety Act spells out the responsibilities of the Secretary of Transportation for rail-related safety, and broadens his authority to meet these responsibilities, particularly as they involve transport of hazardous materials and improvement of grade crossing safety.

Derailments have more than doubled in the last decade. The growing volume of hazardous materials - chemicals, explosives, and highly volatile fuels - being transported by rail increases the potential for disaster. The new Act authorizes a rail safety research program and establishes a central, round-the-clock safety information and reporting system.

Programs. The FRA is also responsible for the operation of three on-going programs: the Bureau of Railroad Safety, the

Office of High Speed Ground Transportation (OHSGT), and the Federally-owned Alaska Railroad.

The Bureau of Railroad Safety implements and enforces all rail safety regulations, investigates railroad accidents, and studies all areas of railroad safety. It identifies major programs, and determines how and where regulatory action can contribute meaningfully to safer railroad operations.

About two-thirds of fatalities involving trains or train service are attributable to collisions at crossings - and the death-to-injury ratio in such accidents is an awesome 1,500 to 3,000. The FRA and FHWA have underway an intensive program to reduce hazards and accidents at the more than 225,000 public grade crossings on Class I and Class II railroads.

The Office of High Speed Ground Transportation has, as a primary concern, the maintaining of mobility in those regions where population growth threatens to overtax existing and planned transportation facilities. The program's basic objective is to develop systems capable of moving large numbers of people at high speeds with an economical use of space.

In its early years, OHSGT focused on developing methodology and other planning tools for solving identifiable transportation problems, particularly as exemplified in the Northeast Corridor. With the transfer of this planning function to the Office of the Secretary in 1970, OHSGT shifted its focus to hardware - to ways and means of accomplishing its objective through improvements in transportation technology.

The experimental high-speed Metroliner service between New York and Washington, D.C., and the Turbotrain service between New York and Boston, continually test feasibility of new concepts both in technology and in passenger service. Department-owned, self-propelled rail test cars, instrumented to collect track data for computer evaluation, periodically inspect the demonstration trackage. This surveillance leads to improved safety and better ride quality.

There are many advantages to conducting running tests of some developmental systems in a test facility rather than in an operational setting such a busy rail line. A high speed ground test center is therefore being developed on a 30,000-acre site near Pueblo, Colorado. Here the quiet, pollution-free Linear Induction Motor (LIM), a Tracked Air Cushion Research Vehicle (TACRV), an automated highway system, experimental hybrid buses and trucks, and other innovative ideas and designs, will undergo controlled testing to determine their feasibility and adaptability to tomorrow's transportation needs. Eventually facilities will be available to test suspended vehicle systems and tube vehicle systems.

Research at the planned rail dynamics laboratory should result in improved designs for track and for freight and passenger cars. OHSGT is also working with the Urban Mass Transportation Administration in developing a special track to test transit equipment and systems.

Much of the research at the center will benefit conventional as well as high speed rail systems and many projects will concentrate on improved railroad safety.

The Railroad's Future. Present forecasts indicate that the railroad industry will be expected to increase its freight haulage by 30% in this decade - to more than one trillion ton-miles annually by 1980. This will require a concentrated effort by government agency transportation managers to keep the railroads healthy.

Access and Right of Way. When health, welfare, or other circumstances necessitate the use of land for public purposes, governmental agencies acquire the land rights as needed. Public utility companies, railroads, or state and federal governments may require the use of private land to bring their services or products to consumers.

Fee Right-of-Way. Land that will be utilized completely may be purchased outright. This is known as a "fee right-of-way" in such cases as highways or storm drain construction; it is termed a fee purchase for all non-right-of way uses, such as libraries, utility stations, service yards, and similar uses.

Easements. Rights of way are also secured in "easement." An easement is a lien on land, permanent or temporary, which gives to the grantee a portion of the rights of the property owner. Easements are usually obtained for electric transmission or telephone lines, or for oil, gas, or water pipes, and are placed so that the owner retains restricted use of his property.

Public transportation organizations frequently obtain easements without payment because the installation of pipes or power lines are of direct benefit to the property owner. When transformer towers, large pipes, or long distance telephone facilities prevent an owner from fully utilizing his property, a right-of-way agent negotiates for its purchase or for payment for the desired easement. Market value of the permanent or temporary easement is usually paid in such circumstances.

Right-of-Way Agents. A right-of-way agent negotiates with the owners or their representatives for the purchase of their property or for the right to use it. The route of a highway, road, or other facility is determined after a thorough study by engineering and right-of-way personnel, who supply maps and

engineering descriptions for the proposed project. Appraisers then establish a fair market value of the property along the route. The right-of-way agent obtains the names of landowners and determines the legal status of the property from official records. He must clear the title of encumbrances of all kinds. He interviews the owners and holders of encumbrances of each parcel of property along the proposed route, and explains his agency's plans and their effect on the landowner.

Even after a suit has been filed, an agent usually continues negotiations until the time of the court hearing. Companies which do not have the power of condemnation have only the alternative of a change of route if the efforts of the right-of-way agent are unsuccessful.

Options. The original settlement made with the owner will often be in the form of an "option," an agreement to sell the land or grant an easement at a stated price within a specified time limit. Such a provision is desirable in the event the agency or company is forced to change plans. An agent usually has little discretion concerning the purchase price, and some administrators are convinced that the offer should not deviate from the appraised value. However, in other instances, the owner's counterproposal may be accepted if facts can be shown in justification, such as valuation data not fully considered in the original offer.

Encumbrances. If property is mortaged, leased for oil exploration, or growing of crops, or has some other encumbrance, the right-of-way agent must also negotiate with the mortgage or lease holder or other interested parties. Some organizations secure exclusive easements, but it is common for two or more utility companies to share an easement, and for right-of-way agents for various companies to work closely with one another. When an agreement has been reached, the right-of-way agent secures the signatures of the principals and prepares escrow instructions. Some agencies have their own procedural routines in lieu of escrow.

Post-Negotiation Efforts. In some organizations, the responsibility of the right-of-way agent ceases after he has negotiated the right-of-way and completed the necessary documents. In other agencies or firms, the agent follows up on complaints of damage from construction activity. Some right-of-way agents manage property acquired by their employer. Others may sell property or issue quitclaim deeds for that which is in excess of needs.

STUDENT LEARNING ACTIVITIES

- List the major federal departments concerned with transportation management, and compare the predominant concerns and duties of each group.

- Write a short summary of the occupational groups found in one of the transportation management agencies.
- List at least three federal and state transportation management agencies and describe their main functions.
- Compare the responsibilities of the agencies which are part of the Department of Transportation with those you feel are important to attainment of a national transportation policy.

TEACHER MANAGEMENT ACTIVITIES

- Arrange for visit by a public service transportation management person.
- Request that students collect materials and information on the function and duties of workers in the field of transportation management.

RESOURCES

U.S. Department of Transportation - Facts and Functions, Department of Transportation, U.S. Government Printing Office, 1971.

The First Three Years: Why There Is A Department of Transportation and How It Was Organized, Alan L. Dean, U.S. Department of Transportation, Office of the Secretary, 1970.

FAA What It Is: What It Does, U.S. Government Printing Office, 1972.

A Picture Story of the FAA, Federal Aviation Administration, 1971.

Transportation: Air Transportation, Herbert M. Elkins, (Filmstrip), 1969.

Transportation: Airplanes and Helicopters, Herbert M. Elkins, (Filmstrip), 1969.

Transportation: Airplanes and Helicopters At Work, Herbert M. Elkins, (Filmstrip), 1969.

Our Shrinking World: Jet Pilot, Encyclopedia Brittanica, (Film, 17 min., Black and White), 1969.

The Story of Safety In the Sky, U.S. Federal Aviation Administration, (Cartoon Booklet), 1970.

Railroads, Charles E. Merrill, 1969.

Transportation by Water, Eye Gate House, (Sound, Filmstrip, color), 1970.

Water Transportation, Curriculum Materials Corporation, (Filmstrip, color), 1969.

Transportation: America's Inland Waterways, Coronet Films, (Film, 14 min., Black and White and Color), 1970.

Transportation on Water, Eye Gate House, (Sound, Filmstrip, color), 1970.

Water Transportation, Eye Gate House, (Chart), 1970.

Water Systems, Coronet Films, (Sound, Filmstrip, 50 frames, color), 1970.

Unit 3 Functions and Duties of Workers

INSTRUCTIONAL OBJECTIVES

1. Ability to describe the major duties performed by workers in transportation management.

2. Ability to compare and contrast the general duties of workers in transportation management.

3. Ability to make a list of the typical jobs that exist in transportation management and describe the duties performed in at least six of the jobs.

CONTENT

Commonality of Jobs. Most jobs in transportation management are identical to jobs in industry. Likewise, many identical jobs are found in each of the four major transportation systems. In the past, while there was some movement of personnel from industry to public service within a particular transportation system, there was little mobility between transportation systems. Thus if the railroads were reducing personnel, the employee found it difficult to move into a job requiring essentially the same skills in another transportation system. To get work the employee either reverted to an entry level job in the new system, or obtained employment outside the transportation industry.

Function and Duties of Workers. This unit contains brief descriptions of the major functions and duties of workers in the field of transportation management. Some of these descriptions are rather narrowly confined to one area of work, but where it is feasible to do so, one or two descriptions are written to cover a general area encompassing several related positions.

As noted earlier, transportation management (outside work done by state police) is largely a federal activity. While concentrated at the federal level, its size and complexity is enormous.

Airways Job Family

Air Traffic Controllers are the guardians of the airways. These employees of the Federal Aviation Administration (FAA) give instructions, advice, and information to pilots by radio to avoid collisions and minimize delays as aircraft fly between airports or in the vicinity of airports. When directing aircraft, traffic controllers must consider many factors, including weather; geography; the amount of traffic; and the size, speed, and other operating characteristics of aircraft. The men who control traffic in the areas around airports are known as "airport traffic controllers"; those who guide aircraft between airports are called "air-route traffic controllers."

Airport Traffic Controllers are stationed at airport control towers to give all pilots within the vicinity of the airport weather information, and take-off and landing instructions, such as which approach and airfield runway to use, and when to change altitude. They must control simultaneously several aircraft which appear as tiny bars on a radar scope. They talk on the radio first to one and then to another of the pilots of these planes, remembering their numbers and their positions in the air, and give each of them different instructions. These workers also keep records of all messages received from aircraft and operate runway lights and other airfield electronic equipment. They also may send and receive information to and from air-route traffic control centers about flights made over the airport.

Air-route Traffic Controllers are stationed at air traffic control centers to coordinate the movements of aircraft which are being flown "on instruments." They use the written flight plan which are filed by pilots and dispatchers before the aircraft leaves the airport. To make sure that aircraft remain on course they check the progress of flights, using radar and other electronic equipment and information received from the aircraft, other control centers and towers, and information from FAA or airline communications stations.

Flight Service Station Specialists employed by the FAA do some work similar to that of airline ground radio operators and teletypists. They use radio-telephones, radio-telegraph, and teletype machines in their work. Some operators may use a radio-telegraph to transmit written messages. Radio operators occasionally may make minor repairs on their equipment. Teletypists transmit only written messages between ground personnel. They operate a teletype machine which has a keyboard similar to that of a typewriter.

An airport's facilities, with its resident shops, operating areas, and service facilities, becomes a major center of employment in the community.

Airport Design and Operation is generally performed by a public service agency, while construction is by contract. Facilities engineering, management, and housekeeping tasks ranging from custodial duties to fire fighting are performed by public service employees. Parking facilities, an important source of revenue for operation of airports, may be operated by contractors after design and construction as a part of the airport terminal.

Airport Planning. Traffic engineers, urban planners, financial and real estate specialists, civil engineers and environmental specialists are involved with community leaders, business groups, and property owners in early planning and development of an airport. The design specialities of architects, draftsmen, designers, surveyors, and specification writers reduce the concepts to drawings and descriptive material, and the public relations specialist keeps the public informed of progress.

Airport Construction. Construction of an air transportation center involves virtually all of the construction trades, together with landscape architects, gardeners, security police, and safety inspectors who combine forces to build and check out a small city. Operation of this complex involves hundreds of different skills. A major airport may provide employment for tens of thousands of employees with hundreds of these being employed by the airport administration, a public service agency.

Highways Job Family

Regulation of roadway routes is by governmental agencies, including regulation of access, loads, vehicles, and operators. There is a close working relationship with law enforcement agencies in this activity.

Planning and Design. Traffic engineers, transportation planners, and civil engineers lead the team which plans, designs, and constructs highways, roads and streets. Photographers provide aerial photographs to draftsmen and data processing personnel who lay out the route. Real estate appraisers and specialists negotiate for property on the right of way and public information specialists advise the community of developments.

Supporting services are provided by architects, landscape architects, environmental engineers, safety engineers and cost estimators. Materials test laboratory technicians or engineering aides prepare and test soils and materials samples.

Operation. The transportation agencies keep close watch over operations of the system through traffic counters, traffic records specialists, and road safety specialists. Traffic engineers evaluate operations to develop information for use in future designs.

Public service agencies in the transportation system use a great variety of both general and special purpose vehicles and equipment. Automobiles, trucks, snow plows, paving machines, and center-line striping vehicles are but a few. Drivers, equipment operators, mechanics, parts clerks, vehicle dispatchers, data processing personnel, and accountants are a few of the types of personnel involved in operations.

Traffic Control. Controls for highway transportation systems must provide information to the traffic control centers and directions to the operator, but at the same time must be designed to present a minimum hazard to moving vehicles. Research is conducted in both state and federal laboratories on signs, traffic sensors, barriers, computer devices, and other equipment by research teams which include engineers, laboratory technicians, drivers, instrumentation technicians, photographers, and draftsmen.

Electrical and electronic technicians and engineers develop and maintain signal and communication systems. Helicopter pilots monitor traffic flow along busy routes and provide advice to motorists by radio.

Rate Regulation. Public service personnel are also involved in regulation of loads carried to establish permissible tariff rates; set weight and size limitations; and set requirements for handling, routing, and movement of hazardous materials.

Rate auditors, rate clerks, accountants, data processing personnel, road and vehicle safety inspectors, and claims investigators are involved in this work.

Driver Regulation. Transportation management personnel are involved in examination and certification of operators to issue driver permits; in investigation of accidents to determine causes and recommend remedial measures, and in checking operators for compliance with regulations.

The personnel involved in regulation of operators are frequently assigned to the state highway police organization and include vehicle operator examiner, examination center clerk, data processing center personnel, and accident investigators.

Railways Job Family

The size, complexity, and cost of the changes in railroad systems to meet the new demands requires heavy involvement of the government. Research and development for new track, and for passenger and freight systems, involves Department of Transportation personnel at all levels.

While design and construction of the long-haul railroad facilities will continue to be dominated by the railroad companies, the design of passenger terminals and high speed passenger systems is mostly in the public service area. Passenger service specialists, urban planners and right of way specialists contribute input concerning the needs of passengers and of the community. Needs are converted into designs for new routes and terminals.

As the mass urban transit and high speed long-haul systems expand, the public service area becomes more involved in railroad control systems for railroads operated by regional governmental agencies.

Public service personnel will become increasingly involved with passenger handling as the number of regional mass transit systems expands. Rates must be evaluated and set, revenues collected and accounted, and systems paid off.

Public service personnel are operating or directing operations of a large part of the rail passenger traffic in the U.S.A.; either directly, or through contracts with the railroads. The training, certification, and direction of operators and supporting personnel is an increasing area of responsibility.

Traffic Rate Clerks in public service usually work for the Interstate Commerce Commission (see Regulatory Services Section), or state public utilities commissions. They answer public inquiries, quote rates, interpret tariffs, and may help traffic engineers in obtaining, classifying, and compiling data.

STUDENT LEARNING ACTIVITIES

- Visit a local airport and observe the typical duties performed by air traffic controllers. Write a short summary on activities observed on field trip.
- Talk to personnel officer at local airport or port facility and ask questions about the jobs found in transportation management and the duties the workers perform.
- Discuss in small groups the functions and duties of workers in air traffic control, rate clerks, and highway safety occupations.
- Prepare a short presentation on the positions found in one of the major occupational groups in transportation management. Contrast the duties performed among the various job families.

TEACHER MANAGEMENT ACTIVITIES

- Invite speakers from the various job families or arrange for students to visit transportation agencies and talk to workers.
- Organize students into small groups for discussion of function and duties of workers in transportation management.
- Collect and display materials on transportation management available from the Department of Transportation, Federal Aviation Administration or the National Aeronautical and Space Administration.

RESOURCES

Occupational Outlook Handbook, Department of Labor, U.S. Government Printing Office, 1972-73.

Highway Traffic Engineer, U.S. Federal Highway Administration, 1971.

The Road to Your Success, U.S. Federal Highway Administration, 1972.

Accounting Majors In the Federal Highway Administration, U.S. Federal Highway Administration, 1971.

Unit 4 Qualifications, Career Lattices, and Employment Prospects

INSTRUCTIONAL OBJECTIVES

1. Ability to discuss the recommended qualifications of workers in public service transportation management.

2. Ability to evaluate his own qualifications, and compare them with the qualifications required for entry level jobs.

CONTENT

A Look Ahead. While systematic transportation management at the state and federal level is relatively new, it still faces tremendous challenges. We need to evolve a transportation system that as soon as 1990 will be expected to carry double today's passenger and freight load; and simultaneously, to unclog the traffic arteries of our cities. And to do so while reducing pollution and traffic noise, improving safety in all modes, conserving open spaces and other natural resources, and generally enhancing the quality of life in America. To meet this challenge, both local and state government will have great need for a variety of persons at the professional, paraprofessional, and skilled levels.

Airways. The field of air transportation management offers many opportunities. There are currently over 170,000 positions scattered throughout the government. This number is expected to grow by approximately 8,000 each year.

Air Traffic Controllers. Total employment of air traffic controllers is expected to increase moderately through the 1970's, despite the greater use of automated equipment.

Additional air traffic controllers will be needed because of the anticipated growth in the number of airport towers that will be built to reduce the burden on existing facilities, and to handle increasing airline traffic. More airport controllers

also will be needed to provide services to the growing number of pilots outside of the airlines, such as those employed by companies to fly executives.

Air Route Traffic Controllers. A number of additional air route traffic controllers will be needed during the next few years to handle increases in air traffic. However, with the expected introduction of an automatic air traffic control system and a further decline in the number of control centers, employment of air route traffic controllers is expected to moderate in the long run.

A few hundred openings will occur each year for controller jobs because of the need to replace those workers who leave for other work, or retire.

Personnel for all government air traffic controller positions are chosen by civil service examination. In addition to passing a written test, the prospective controller must be employed in or have been employed at an appropriate tower, center, or any combination of these facilities; or pass a written test with a higher score and hold (or have held) one of the following: an FAA certificate as a dispatcher for a scheduled or irregular air carrier; an instrument flight rating; an FAA certificate as a navigator; or he must have been fully qualified as a Navigator/Bombardier in the Armed Forces.

A person who lacks these requirements must pass the written test with a higher score. In addition, he must have completed a four-year college course leading to a bachelor's degree; or have had three years of progressively responsible experience in administrative, professional, investigative, technical, or other work which would prepare an individual to enter into a position of comparable responsibility; or have an equivalent combination of the above education and experience. A year of academic study is considered equivalent to nine months of experience.

Although most controllers are men, some women work at the center and at local towers. The minimum age is 18 years, or 16 years if the candidate is a high school graduate. A few men over 50 years of age are still working in this field, but one of the leaders speaks of air traffic control as a "young man's game." Anyone hired must pass a stringent physical and psychological examination required by Civil Air Regulations. Traffic controllers must also pass an annual physical examination.

The controller needs a good memory and a high degree of mental alertness. He should be able to make quick, independent decisions. He must be able to concentrate amid noise and confusion, and should not be easily disturbed by unexpected changes in situations. He should be emotionally mature and be able to work independently, or in a small room filled with people.

Public Service. While the FAA is currently the largest public service employer in air transportation, numerous other jobs in government will emerge in the next ten years. Many of these will be with local airports, or will relate to staffing local public service authorities' offices. These jobs deal with operations, control, and regulatory services. Most positions in air transportation, including ground radio operators, teletypists, and managers, have a poor employment outlook during the decade of the 1970's.

While transportation management organizations require individuals with many different skills, most positions outside those concerned with airport facilities operation and law enforcement require a college degree. In some instances, experience in a specific phase of the transportation industry may be substituted in lieu of education.

Highways. The increase in highway construction has resulted in many jobs. The Federal Highway Administration has a budget of over 4 billion dollars a year, and is by far the largest organization at the federal level concerned with roadways. Each year the FHWA provides aid to local communities, conducts safety education programs, holds demonstration clinics, and works with the major motor carriers and their associations on transportation safety. Their work is decentralized, and its employees are employed in offices both large and small throughout the United States.

Most new employees of the Federal Highway Administration are college graduates majoring in business, engineering, or accounting.

The Highway Engineer Training Program is usually the entry level for engineering graduates. This program is 27 months long, and involves study and work in all phases of highway administration, including location, design, planning, construction, maintenance, traffic engineering, and safety. Trainees start at approximately $8,000 per year, and advance to almost $13,000 by the end of training.

Accountants are also very much in demand by FHWA. Trainee posts are available as the first step in the career lattice. An auditor receives on-the-job training that will give practical experience in the application of auditing principles and other duties. FHWA has a policy of periodically moving auditors from one geographic location to another.

Whether one enters the Auditor Training Program at a grade of GS-5, or at the GS-7 level, advancement opportunities are based upon performance and development. Automatic consideration for promotion, once training is completed, is determined by competitive procedures under the Federal Highway Administration's Merit

Promotion Plan. All promotions are based upon demonstrated work performance.

Right-of-Way Agents. At the state level, people with backgrounds as "right-of-way" agents are much in demand. An initial duty of a newcomer to right-of-way work may be to serve summonses in condemnation cases, or to search public records. Under close supervision, he may obtain free easements, or secure small parcels of ground, especially unimproved land or single-family residences. As he gains experience, he negotiates for rights involving larger sums of money, as in the acquisition of commercial or industrial property. In the Division of Highways of the California Department of Public Works, he may be given responsibility for management of state-owned property. During the period between acquisition of the right-of-way and clearance of the land when construction begins, his duties include renting property, collecting rents, seeing that the property is maintained in good repair, and evicting tenants for nonpayment of rent.

It is most common in this area for an employee to specialize in either appraisal or right-of-way acquisition. In some organizations, notably the Division of Highways, a right-of-way agent both appraises and negotiates, but he does not negotiate for the same property he has appraised.

Some right-of-way agents work for independent concerns which negotiate for all types of agencies and companies. This may include a small city which has no full-time appraiser or right-of-way agent, or an oil company which lacks sufficient staff to complete extensive negotiations.

Much of the right-of-way agent's time is spent away from his office, consulting public records, inspecting property, or interviewing owners or other interested persons. Some organizations furnish automobiles, while others provide a car allowance.

STUDENT LEARNING ACTIVITIES

- Study file on statistics on the employment expectations of jobs in transportation management.
- Write a short comparison on employment expectations of jobs in transportation management.
- List the employment opportunities and entry level salaries for public service transportation management workers in your state.
- Discuss with other students jobs available in a job family of your interest.

- Interview an air traffic controller who works in your community.

- Become an "aide" for a day to a person who is involved at a professional level in highway construction or management.

TEACHER MANAGEMENT ACTIVITIES

- Prepare and make available to students a file on statistics and information on public service jobs in transportation management.

- Arrange for an address by a representative of the personnel department of the Department of Transportation, FAA, or other similar organizations.

- Have students develop "typical" career lattices for public service jobs in transportation based on interviews with workers.

RESOURCES

Occupational Outlook Handbook, Department of Labor, Bureau of Labor Statistics, U.S. Government Printing Office, 1972-73.

Intermodal Transportation Careers, E. J. Kirschner and Associates, 1971.

Aviation - Where Career Opportunities Are Bright, National Aerospace Education Council, (filmstrip and handbook), 1970.

Air Traffic Control Specialists, U.S. Civil Service Commission, Announcement 418.

Opportunities in Traffic Management, Carlton C. Robinson, Universal Publishing and Distributing Corporation, 1967.

A Career in Traffic Engineering, Institute of Traffic Engineers, 1969.

Appendix A

LISTING OF RESOURCE SUPPLIERS

Appendix A

RESOURCE SUPPLIERS

This appendix is a listing of suppliers of resources itemized at the end of each unit of the individual sections.

Aldine Publishing Company
529 S. Wabash Avenue
Chicago, Illinois 60605

Amer. Assoc. of Elementary,
Kindergarten, Nursery Educators
National Education Association
1201 16th Street, N.W.
Washington, D.C. 20036

American Assoc. of Junior Colleges
1315 16th Street, N.W.
Washington, D.C. 20036

Amer. Assoc., School Administrators,
National Education Association,
Publication Sales Section
1201 16th Street, N.W.
Washington, D.C. 20036

American Correctional Assoc.
Box 10176
Woodridge Station
Washington, D.C. 20018

American Educational Films
34th Floor Suite
777 3rd Avenue
New York, New York 10017

American Federation of Teachers
1012 14th Street, N.W.
Washington, D.C. 20005

American Forestry Association
919 17th Street, N.W.
Washington, D.C. 20006

American Institute of Architects
Library
1736 New York Avenue, N.W.
Washington, D.C. 20006

American Institute of Planners
917 Fifteenth Street, N.W.
Washington, D.C. 20005

American Law Institute
101 N. 33rd Street
Philadelphia, Pennsylvania 19104

American Library Association
50 East Huron Street
Chicago, Illinois 60611

American Management Assoc., Inc.
135 West 50th Street
New York, New York 10020

American Mutual Life Insurance Company
Liberty Building
Des Moines, Iowa 50307

American Personnel & Guidance Association, Publication Sales Department
1607 New Hampshire Avenue
Washington, D.C. 20009

American Society of Planning Officials
1313 East 60th Street
Chicago, Illinois 60637

American Vocational Association
1510 H Street, N.W.
Washington, D.C. 20005

Amidon, Paul S., and Associates
5408 Chicago Avenue South
Minneapolis, Minnesota 55417

Anderson, W. H., Company
646-650 Main Street
Cincinnati, Ohio 45201

Appleton-Century-Crofts
440 Park Avenue South
New York, New York 10016

ARCO Publishing Company, Inc.
219 Park Avenue South
New York, New York 10003

Association for Childhood Education International
3615 Wisconsin Avenue, N.W.
Washington, D.C. 20016

Association Films, Inc.
600 Grand Avenue
Ridgefield, New Jersey 07657

Association Press
291 Broadway
New York, New York 10007

Avon Books
959 8th Avenue
New York, New York 10019

Brandon Films
221 West 57th Street
New York, New York 10019

Bank Street College of Education
Publications Department
419 Park Avenue, South
New York, New York 10016

Bete, Channing L., Company
Box 112
Greenfield, Massachusetts 01301

B'nai B'rith Vocational Service
1640 Rhode Island Avenue, N.W.
Washington, D.C. 20036

Board of Trustees
University of Illinois
Urbana, Illinois 61801

Bobbs-Merrill Company, Inc.
4300 W. 62nd Street
Indianapolis, Indiana 46268

Bureau of the Census
Department of Commerce
U. S. Government Printing Office
Washington, D.C. 20233

Bureau of Instructional Services
Department of Public Instruction
Education Building
Harrisburgh, Pennsylvania 17120

Bureau of Labor Statistics
U. S. Department of Labor
Washington, D.C. 20212

The Bureau of Public Roads
Photographic Section
Washington, D.C. 20235

CCM Information Sciences, Inc.
909 Third Avenue
New York, New York 10022

California Department of Human
Resources Development
800 Capitol Mall
Sacramento, California 95814

California Highway Patrol
2611 26th Street
Sacramento, California 95818

California State Department of
Education
721 Capitol Mall
Sacramento, California 95814

California State Resources Agency
1416 9th Street
Sacramento, California 95814

Callaghan and Company
6141 N. Cicero Avenue
Chicago, Illinois 60646

Canadian Film Institute
142 Sparks Street
Ottawa, Canada

Carousel Films, Inc.
1501 Broadway, Suite 1503
New York, New York 10036

Catholic University of America
Press
620 Michigan Avenue, N.E.
Washington, D.C. 20017

Center for Democratic Institute
2056 Eucalyptus Field Road
Montecito, California 93103

Central Mortgage and Housing
Corporation
Liaison Officer
Audio-Visual Aids
Ottawa 7, Canada

Chandler Publishing Company
124 Spear Street
San Francisco, California 94105

Chronicle Guidance Publications
Moravia, New York 13118

Churchill Films
6671 Sunset Boulevard
Los Angeles, California 90028

Clearinghouse, Federal Scientific
and Technical Information
2285 Port Royal Road
Springfield, Virginia 22151

College and University Press
263 Chapel Street
New Haven, Connecticut 06513

Columbia University Press
Center for Mass Communication
440 West 110th Street
New York, New York 10025

Commonwealth of Pennsylvania
Department of Public Instruction
Public Service Institute
Harrisburg, Pennsylvania 17126

Communications Programs
General Electric Company
159 Main Street
Bay St. Louis, Mississippi 39520

Congressional Quarterly, Inc.
1735 K Street, N.W.
Washington, D.C. 20006

Connecticut Highway Department
Public Relations Director
Hartford, Connecticut 06115

The Conservation Foundation
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036

Consolidated Film Industries
959 Seward Street
Hollywood, California 90038

Contemporary Films, Inc.
Film Rental Library
Princeton Road
Hightstown, New Jersey 08520

Coronet Films
65 E. South Water Street
Chicago, Illinois 60601

Criminology and Political Science
357 E. Chicago Avenue
Chicago, Illinois 60611

Crowell, Thomas Y., Company
201 Park Avenue, South
New York, New York 10003

Curriculum Materials Corporation
1319 Vine Street
Philadelphia, Pennsylvania 19107

Davis Publishing Company
250 Potrero Street
Santa Cruz, California 95060

Defense Contract Audit Agency
Policy and Programs Branch
Personnel Division
Cameron Station
Alexandria, Virginia 22314

Denoyer-Geppert Company
5235 Ravenswood Avenue
Chicago, Illinois 60640

Department of Agricultural
Journalism
College of Agriculture
University of Wisconsin 53706

Department of the Interior
Office of Personnel
Washington, D.C. 20240

Director of Advancement and
Public Information
American Water Works Assoc.
2 Park Avenue
New York, New York 10016

Dodd, Mead and Company
79 Madison Avenue
New York, New York 10016

Doubleday and Company, Inc.
501 Franklin Avenue
Garden City, New York 11530

Educational Sensory Programming,
Inc.
Taylor Teaching Tapes
960 Melrose Avenue
Chula Vista, California 92010

Elizabethtown Gas Company
One Elizabeth Plaza
Elizabeth, New Jersey 07207

Elkins, Herbert M., Company
10031 Commerce Avenue
Tujunga, California 91042

Employment Information Center
Room 1050L
14th and Constitution Avenue, N.W.
Washington, D.C. 20230

Encyclopaedia Brittanica, Inc.
425 N. Michigan Avenue
Chicago, Illinois 60611

Encyclopaedia Brittannica Films
38 West 32nd Street
New York, New York 10001

Enoch Pratt Free Library
400 Cathedral Street
Baltimore, Maryland 21201

Environmental Education
U. S. Government Printing Office
Washington, D.C. 20401

Environmental Protection Agency
Washington, D.C. 20460

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Bureau of Labor Statistics
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Appendix **B**

SUGGESTED EVALUATION QUESTIONS FOR PRE- AND POST-TESTS

Introduction

These tests are keyed to the Curriculum guide of the Public Service Occupations curriculum.

The Orientation guide includes the following sections:

Section 1 — Governmental Agency Management
Section 2 — Social and Economic Services
Section 3 — Educational Services
Section 4 — Resources Management
Section 5 — Rural, Urban and Community Development
Section 6 — Law Enforcement
Section 7 — Regulatory Services and Records
Section 8 — Transportation Services

These tests were developed to help teachers:

(1) measure student learning gain.
(2) determine if the instructional objectives have been met.

Test Contents

Any evaluation of student learning should adhere closely to the intended outcomes expressed in the written objectives. Therefore, each test is based on the specific instructional objectives found in its corresponding unit in the Orientation guide. Every item of each test is directly associated with one of the objectives found in the guide for that unit.

These tests are structured to help determine whether the student has become competent or not in each unit. The items for each test relate only to the instructional objectives found at the beginning of that unit in the guide. No test items refer to material found in previous or later units. Consequently, each unit in the teacher's guide and its corresponding test can be used independently.

The evaluative approach used in these tests is not designed to measure the relative standing of each student to an actual or hypothetical population. Rather, it is designed to report a student's performance solely in terms of objectives mastered or not mastered. Each student can reach or exceed the minimum performance standard or criterion. Hence, this testing is called criterion referenced testing.

Directions

The tests have been prepared as master copies which may be duplicated for student distribution.

There is a separate test for each unit of instruction in the curriculum guide. For example, test number one can be used as a pretest and a post-test with the content in Curriculum Guide Unit 1 — Nature of the Field.

Because each class is unique, instructors may add or delete any test items desired.

These tests have been given under nearly every conceivable condition, formal group testing, informal individual sessions, and "take home" tests. In so far as can be determined, satisfactory results were obtained under every condition.

In response to the demand for a system that is easy to use, a convenient answer key for each test has been included in this folder.

The tests provide an objective method for determining student learning gain, while freeing teachers to use valuable time for instruction.

Validity

The validity of any test must be determined in reference to the particular use for which the test is being considered. As these tests are essentially measures of student achievement, they must have content validity. Content validity involves the systematic examination of the test content to insure that it covers a representative sample of the behavior domain to be measured. By employing questions that directly relate to the instructional objectives in each unit, content validity is insured.

An experimental edition of this test was field tested in twelve schools, which were selected on the basis of size of school and community. Over 1,000 secondary school students were involved in the validation testing. Socio-economic groups taking the test ranged from the disadvantaged to upper middle-class. The schools were also selected to gain a student population from urban, suburban, and rural areas. In each of the schools, the teacher first gave the students a pretest before the content was introduced. The same testing instrument was used as a post-test. The objectives were to measure student learning which took place as a result of studying the material in the instructional unit, and to establish criterion referenced tests for use by schools throughout the country. For this purpose, a percentage passing of 70 percent or above on the post-test was considered to be an acceptable criterion mastery for that unit. No norms were established for these tests. It is suggested that each student be able to successfully pass 70 percent of the questions for each instructional unit that he is tested on. During this field test, suggestions for improving these tests were also made. The criterion referenced tests in this booklet are based on the pretest and post-test material used in this validation study.

Other Means of Evaluation

It should be remembered that the instructor can use a wide assortment of test situations to evaluate students.

Each student can do a project on one of the eight major occupational groups.

Instructors may wish to determine the depth of each student's knowledge by assigning essay questions on each of the eight areas of public service.

Students may deliver five-minute speeches on public service at the federal, state, and local levels.

The class may be divided into panel groups, with each group discussing problems in one occupational group of public service.

Students may prepare job ladders, and give presentations describing typical activities for entry-level workers in each occupational group.

Role-playing based on the work of a governmental agency can reveal how knowledgeable a student is about that agency.

These are only a few of the methods that can be used to evaluate the growth and development of each student.

Acknowledgements

The Public Service Occupations tests were developed and field tested in twelve locations. While many people were involved in this project, the staff is particularly indebted to the following people:

Lillian Avery,	Test Research Center Los Angeles, CA
Victor Backstrom,	Long Beach Unified School District Long Beach, CA
Dr. William E. Burns,	State University of New York Buffalo, New York
William Crane,	San Diego Unified School District San Diego, CA
Thomas Franklin,	San Diego Unified School District San Diego, CA
Gilbert Garcia,	Sacramento City Unified School District Sacramento, CA
Lt. Charles Kane,	San Leandro Police Department San Leandro, CA
Dr. Nellie M. Love,	Sweet Home Central School District Amherst, New York
James B. Mayo,	Fremont Unified School District Fremont, CA
Myron Nadolski,	Grant Joint Union School District Sacramento, CA
Nadine L. Reed,	San Diego Unified School District San Diego, CA
James J. Reilley, S.J.,	Canisius High School Buffalo, New York
Rosalia Salinas,	San Diego Unified School District San Diego, CA
Paul E. Sugg,	Williamsville Central Schools Williamsville, New York
Tom Schrodi,	Orange Unified School District Orange, CA
Thea Stitum,	Sacramento City Unified School District Sacramento, CA

Project Staff

Patrick J. Weagraff, Ed. D., Project Director

James J. Lynn, Curriculum Specialist

Constance F. Gipson
Assistant Curriculum Specialist

Harold M. Blue, Senior Editor

Lillian Deger, Typist

Miriam Dong, Typist

Unit 1 Nature of the Field

1. **Public service jobs are those done by people in:**
   A. Local government _____
   B. State government _____
   C. Federal government _____
   D. Local, state and federal governments _____

2. **Which one of the following is not a public service job:**
   A. Teacher _____
   B. Gas station attendant _____
   C. Welfare worker _____
   D. City clerk _____

3. **The money for public service jobs comes from:**
   A. Taxes _____
   B. Non-profit organizations _____
   C. Taxes and donations _____
   D. Individuals _____

4. **The largest public-service employer in the United States is:**
   A. Local government _____
   B. State government _____
   C. Federal government _____
   D. None of the above _____

5. **Which one of the following is not a major concern in public service:**
   A. Environment _____
   B. Housing _____
   C. Education _____
   D. Buying _____

6. **Choose the occupational group which protects people and their belongings, and stops crimes.**
   A. Public Safety, Corrections, and Judicial Services _____
   B. Regulatory Services and Records _____
   C. Educational Services _____
   D. Social and Economic Services _____

7. **Which one of the following is not a public service job:**
   A. Freeway planner _____
   B. Probation officer _____
   C. Border patrol officer _____
   D. Car salesman _____

8. **Which job family includes the objective of helping a family to become self-supporting:**
   A. Social and Economic Services _____
   B. Regulatory Services and Records _____
   C. Educational Services _____
   D. Transportation Management _____

9. **Which of the following job families is not found in the field of educational services:**
   A. Teachers _____
   B. Counselors _____
   C. Humane Officers _____
   D. Principals _____

Answer Key

1. d	4. c	7. d
2. b	5. d	8. a
3. a	6. a	9. c

Unit 2 Governmental Agency Management

1. **Which of these is not part of an agency's organizational objective:**
   A. The aims of an organization _____
   B. Gives purpose to the organization _____
   C. Enables measurements to be made as a success and failure _____
   D. Who the employees work for _____

2. **When many agencies are doing the same thing and getting in each others' way, what should an agency manager do to straighten out the situation:**
   A. Organize his staff _____
   B. Employ more people _____
   C. Meet with representatives of the other agencies _____
   D. Meet anticipated objectives _____

3. **One of the following is not a major task in government agency management:**
   A. Organizing the staff _____
   B. Teaching driver's education _____
   C. Meeting with representatives of other agencies _____
   D. Resolving issues and problems _____

4. **New managment methods employ the latest theories of:**
   A. The physical sciences _____
   B. The behavioral sciences _____
   C. The earth sciences _____
   D. All of the above _____

5. **Planning involves:**
   A. Evaluating conditions and making decisions based on anticipated conditions _____
   B. Managing an agency of the government _____
   C. Concentrating all the powers of government on a specific problem _____
   D. None of the above _____

6. **Public service managers who work in the area of "controlling":**
   A. Establish standards _____
   B. Appraise performances _____
   C. Correct deviations or errors _____
   D. All of the above _____

7. **The chief administrator in a public service agency is normally responsible for:**
   A. Fiscal and public information _____
   B. Contract and personnel _____
   C. Relations management and agency goals _____
   D. All of the above _____

8. **Most public service managers have:**
   A. Good public relations and technical skills _____
   B. Good legal and arbitrations skills _____
   C. Good academic and experience backgrounds _____
   D. None of the above _____

9. **General management is:**
   A. A must for entry level work _____
   B. A combination of a number of skills and abilities which enable an individual to handle a high level of responsibility _____
   C. The ability to get along well with people and let them do their own thing _____
   D. All of the above _____

Answer Key

1. d	4. b	7. d
2. c	5. a	8. c
3. b	6. d	9. b

Unit 3 Basic Components of Governmental Agency Administration

1. Fiscal management is concerned with:

A. Devising accounting systems _____
B. Developing budget procedures _____
C. Insuring that enough funds are available for operations, and that the funds are properly expended _____
D. All of the above _____

2. Choose the correct definition of a government agency budget:

A. The plan of how to spend next year's money _____
B. The process that makes sure that the money is spent the way it was planned _____
C. The plan for raising the money _____
D. The process of getting a loan _____

3. A contract is an agreement between two persons or agencies to do something. Contracts involve two parts — please choose the correct combination.

A. Naming the price and arguing over it _____
B. Making an offer and rejecting it _____
C. Making an offer and accepting that offer _____
D. Naming the price and rejecting it _____

4. Which of these is not a Governmental Agency Contract.

A. Contract for services _____
B. Production of goods and materials _____
C. Jurisdictional agreements _____
D. None of the above _____

5. When a governmental agency wants to build something such as a dam or an office building, the contract will be put out to bid. Choose the answer that best describes what happens then.

A. The largest company will get the job _____
B. Different companies will estimate the cost and the one with the lowest bid and best quality will get the job _____
C. The company with the lowest bid will always get the job _____
D. The highest bidder gets the job _____

6. Employees Relations deals with public service employees as an organized group. Which of the following is not a function of this group:

A. Negotiating differences (such as hours, working conditions) between agency and employees _____
B. Trying to get the most favorable conditions for itself _____
C. Settling disputes over matter such as a complaint by a worker _____
D. Hiring new employees to take the place of those fired _____

7. **Public Relations associations try to present a favorable picture of what government is doing for the public. Which situation would a public relations person not publicize:**
   A. Mayor cutting the ribbon at the opening of the City Hall _____
   B. County executive investigated for taking contractor's bribes _____
   C. City employees giving generous gifts to the orphanage at Christmas time _____
   D. The opening of a neighborhood park _____

8. **Who is responsible for the external communication of most governmental agencies:**
   A. Public information Managers _____
   B. Directors _____
   C. Officers _____
   D. All of the above _____

9. **The Fiscal Manager is also concerned about:**
   A. Programs controlled by a budget _____
   B. Chance of losing money _____
   C. Preparing financial statements _____
   D. All of the above _____

10. **Since the public pays the taxes that support the government, they have a right to information about their government. Which of the following answers would the public not have a right to know:**
   A. Why the taxes are going up _____
   B. Personnel problems _____
   C. Where a new road is going to be built _____
   D. The new conservation policies of the city _____

11. **Public Information Managers use which media to inform the public:**
   A. Newspapers and journals _____
   B. Magazines and pamphlets _____
   C. Radio and television _____
   D. All of the above _____

12. **The basic difference between "internal" and "external" communications in a public-service agency is:**
   A. Communicating within an agency versus communicating outside an agency _____
   B. Communication with an agency versus communcating between agencies _____
   C. Communicating within a particular office of an agency versus communicating outside of the office in the same agency _____
   D. None of the above _____

Answer Key

1. d	4. c	7. b	10. b
2. a	5. b	8. a	11. d
3. c	6. d	9. d	12. a

Unit 4 Functions and Duties of Workers

1. **The public-service manager has many responsibilities on the job. Which of the following is not within his area of responsibility:**
   A. Determine the amount of employee's pay raises _____
   B. Sets the goals for his company's workers _____
   C. Is responsible for the total effort of the organization _____
   D. Evaluates people and programs _____

2. **In public-service, most people become managers by:**
   A. Having influential friends or relatives _____
   B. Being promoted to a management position by a higher authority _____
   C. The political "spoils" system _____
   D. All of the above _____

3. **Public Relations Managers have many jobs. Which is not one of his jobs:**
   A. Examining budgets _____
   B. Writing articles for newspapers _____
   C. Developing TV programs _____
   D. Making signs and posters _____

4. **Which of the following jobs would be paid the most:**
   A. Lieutenant Governor of a state _____
   B. Governor of the same in (A.) above _____
   C. Manager of a state department _____
   D. Trustee of the state university _____

5. **Which is not one of the jobs of the Contract Manager:**
   A. Examining bids _____
   B. Preparing contracts _____
   C. Preparing goals for the government _____
   D. Deciding which bid will be awarded the contract _____

6. **Persons at the top levels of any government are usually paid more than the workers at the bottom. Which of the following is not one of the reasons for this:**
   A. They usually work more than a regular 40 hour week _____
   B. They are responsible for the running of an entire governmental agency _____
   C. They have worked longer _____
   D. They are usually older _____

7. **Managers may work in general on fiscal management, contract, or personnel management, and public information or relations management. These are all:**
   A. Career families _____
   B. Occupational groups _____
   C. Job families _____
   D. All of the above _____

8. **Managers of local governmental agencies earn:**
   A. Less than federal level managers _____
   B. About the same as federal level managers _____
   C. More than federal level managers _____
   D. More than managers in private business _____

Answer Key

1. a	3. a	5. c	7. c
2. b	4. b	6. d	8. b

Unit 5 Employment Qualifications

1. Most of the heads or managers of a governmental agency become managers by:
- A. Starting at the bottom and working their way up _____
- B. Supervising larger and larger groups of workers _____
- C. Having some college education _____
- D. All of the above _____

2. What length of academic training do you think would be expected for a public administrator, business administrator, or public relations position:
- A. A two-year college degree _____
- B. A one-year training course in public administration _____
- C. A four-year college degree _____
- D. A high school diploma _____

3. Which of the following is considered an executive position in General Management:
- A. City Manager _____
- B. Director of a state program _____
- C. Secretary of Labor _____
- D. All of the above _____

4. Following a career ladder, one can work up in personnel management from an entry level job at what age:
- A. 16 and up _____
- B. 25 and up _____
- C. Any age over 21 _____
- D. 18 and older _____

5. For a Fiscal Management job, a college education is usually required. A college degree is normally needed for which of the following jobs:
- A. Accountant _____
- B. Business Administrator _____
- C. Public Administrator _____
- D. All of the above _____

6. If an individual continued with his education after high school he would:
- A. Attend a university, graduate school, and then a community college _____
- B. Attend a community college, university, and then a graduate school _____
- C. Attend a community college, university, and then begin working at an entry level _____
- D. None of the above _____

7. **In order to become an effective manager, one would need:**
   A. At least six months experience
   B. Between one to two years of experience
   C. Several years of experience
   D. None of the above

Answer Key

1. d	5. d
2. c	6. b
3. d	7. c
4. d	

Unit 6 Employment Prospects

1. Jobs that will increase only slightly or level off in public-service are:
- A. Replacement jobs _____
- B. Growing jobs _____
- C. Technical jobs _____
- D. None of the above _____

2. Employment prospects look good in the field of public-service, but which of the following occupational groups is expected to level off due to a decrease in the birth rate:
- A. Resource Management _____
- B. Rural, Urban and Community Development _____
- C. Educational Services _____
- D. Transportation _____

3. Employment at the federal level is not growing at the same rate as the state and local level. What is the reason why the federal employment is not growing at the same rate:
- A. National population is going down _____
- B. State and local governments are running many new programs _____
- C. There are no new federal programs _____
- D. City governments have a number of growing fields _____

4. The largest percentage of people working in state or local government are:
- A. In police work _____
- B. In fire work _____
- C. In education work _____
- D. In social service work _____

5. Jobs in areas like health, environment, police and fire protection, and new public-service areas:
- A. Are replacement job opportunities _____
- B. Are growing job opportunities _____
- C. Are technical job opportunities _____
- D. Are professional job opportunities _____

6. In the future, trends indicate that state and local government should exceed the number of federal employees by a ratio of:
- A. 2 to 1 _____
- B. 3 to 1 _____
- C. 4 to 1 _____
- D. 5 to 1 _____

7. **In general, new jobs in public service will be oriented for:**
   A. White-collar occupations _____
   B. Clerical jobs _____
   C. Blue-collar occupations _____
   D. All of the above _____

Answer Key

1. a	5. b
2. c	6. c
3. b	7. a
4. c	

Unit 1 Nature of the Field

1. **Social and Economic Services are concerned with helping people to better handle the problems of today's world. Which one of these situations is not handled by the Social and Economic Services**
   A. Family is in need because the parents cannot find work ____
   B. A person gets sick or too old to hold a job ____
   C. There are no more jobs in an area ____
   D. A student wants a scholarship to go to college ____

2. **The principal areas of concern of Social and Economic Services are:**
   A. Family service and child welfare ____
   B. Finding jobs ____
   C. Helping people with housing problems ____
   D. All of the above ____

3. **Workers in Social and Economic Services job families primarily offer:**
   A. Educational services ____
   B. Police protection ____
   C. Counseling and various forms of economic aid ____
   D. All of the above ____

4. **Social and Economic Services are aimed primarily at helping people who are:**
   A. Victims of natural disasters ____
   B. Disadvantaged, underemployed, and unemployed ____
   C. Aliens ____
   D. All of the above ____

5. **Jobs are a major concern in the Social and Economic Services. Which of the following would be considered important in the area of job employment:**
   A. Helping people find a home convenient to employment ____
   B. Finding job training ____
   C. Talking to future employer about prison background ____
   D. All of the above ____

6. **Which of these agencies would fall under the general heading of a Social and Economic Service:**
   A. Public agencies ____
   B. Anti-poverty ____
   C. Model Cities ____
   D. All of the above ____

7. **If the long range plan of a Social and Economic Services agency is to make people self-supporting, what would be the path to follow:**
   A. Give generous allowances so that people's health and self-respect do not suffer _____
   B. Respect and trust the clients _____
   C. Help them find jobs and good housing _____
   D. All of the above _____

8. **Which of the following job families would not be found in Social and Economic services:**
   A. Counseling _____
   B. Examination _____
   C. Rehabilitation _____
   D. Employment _____

9. **The following is not a "basic type" of social and economic service agency:**
   A. Public agencies _____
   B. Anti-poverty agencies _____
   C. Charitable agencies _____
   D. Voluntary or private agencies _____

Answer Key

1. d	4. b	7. d
2. d	5. d	8. b
3. c	6. d	9. c

Unit 2 Early Influences on Social and Economic Services in America

1. In England, between 1350 and 1600, strict laws were passed to make people work. Which of the following was one of these laws

A. Anyone giving money to beggars would be fined _____

B. Able-bodied men might be whipped, branded with hot irons, have an ear cut off, or even be hung if they refused to work _____

C. Children could be forcibly taken from their parents to become apprentices _____

D. All of the above _____

2. The English Poor Laws were important because they started a whole new set of ideas about charity. The result of these laws was:

A. The government stopped giving aid to the disabled, and the Church started _____

B. Although a harsh attitude was used to force people to work, the sick, aged, and disabled were given aid _____

C. All aid or charity was cut off and everyone was forced to work _____

D. All of the above _____

3. The English Poor Laws are important to us because they have guided our social and economic thought and practices. Which of these practices, in use today, came directly from the Poor Laws:

A. Social workers are assigned a certain number of cases _____

B. Some social workers with family and others with older people _____

C. Social workers try to find jobs for their clients _____

D. All of the above _____

4. The American Colonies had interesting ways of dealing with people who needed charity. Which of the following was one of the practices used during that time:

A. Orphans, neglected children, and the disabled were sold into slavery for life _____

B. The poor were put on ships and sent back to Europe _____

C. A citizen contracted to take care of a certain number of paupers or poor people and would be paid by the town _____

D. All of the above _____

5. Why did the use of almshouses or poor housing increase rapidly after the Civil War:

A. People began to move into the cities and off the farms _____

B. The states began to support these houses with money _____

C. The public began to find out that when the poor where "farmed out" or "sold" they were treated very badly _____

D. All of the above _____

6. In the early 1900's, there was a different view of "poverty". What was this new look:

A. Poverty was a natural condition and could not be changed _____
B. If a person was poor, it was his own fault _____
C. Poverty was not longer seen as a way to push someone to work harder but a bad condition that prevented people from really trying _____
D. While some people were rich, others were poor—if you had one group you had to have the other _____

7. What event contributed to high unemployment and business failure during the 1930's:

A. The stock market crash of 1929 _____
B. The reform movement _____
C. The free enterprise system _____
D. The crop disaster of 1928-29 _____

8. The early 1900's were characterized by what "era of thought":

A. English influences _____
B. Reform era _____
C. Colonial era _____
D. Depression era _____

Answer Key

1. d	3. c	5. d	7. a
2. b	4. c	6. c	8. b

Unit 3 Contemporary Concepts Dominating the Social and Economic Services

1. The Social Security Act of 1935 had a brand new idea in it. Which of the following states that new idea:

A. Work was now provided for youth ____
B. Federal money was now given to the states for unemployment relief ____
C. People paid money to the government for a certain number of years and when they retired, they got monthly checks back from the government ____
D. All of the above ____

2. The general goal of the New Deal programs in the 1930's was:

A. To help people economically ____
B. To create more art programs ____
C. To create more health programs ____
D. All of the above ____

3. The purpose of Unemployment Insurance is:

A. To help someone while he is trying to find a new job ____
B. To help people after they retire ____
C. To help youth find jobs ____
D. All of the above ____

4. The Social Security Act of 1935 changed the way money was given out by the government. What was that change:

A. Because people had paid the government while they were working, the government automatically paid them when they retired ____
B. People did not have to take a test to check if they really were poor and needed the money ____
C. No social worker came to your house to see how much money you needed ____
D. All of the above ____

5. Many new social and economic programs were passed in the 1930's, but there are still many problems left to be solved, such as:

A. For serious economic trouble, 26 weeks of unemployment insurance is not enough ____
B. The very poor, those unable to hold a job, are not covered by social security ____
C. The social security payments have often been too low ____
D. All of the above ____

6. Social conditions in the ghettos have been described as very bad. Which of these does not describe the situation in the ghetto areas:

A. The city government usually makes a special effort to provide good services _____
B. Slum housing is often rundown and overcrowded _____
C. There are more welfare cases, higher rates of crime, and more broken families _____
D. Minority groups live in the center of cities because when they try to find jobs or other housing, they meet discrimination _____

7. Which considered social and economic services more of a legal right than a nice benefit:

A. Herbert Hoover _____
B. Franklin D. Roosevelt _____
C. Woodrow Wilson _____
D. Theodore Roosevelt _____

8. The WPA, CCC, and the FERA were all a part of:

A. The New Deal _____
B. The New Republic _____
C. The Social Security Act _____
D. All of the above _____

Answer Key

1. c	3. a	5. d	7. b
2. a	4. d	6. a	8. a

Unit 4 Governmental Attempts to Change Social Conditions

1. Why has the federal government started new programs to change social conditions in cities:

A. It is trying to buy votes by helping people _____
B. It wants to help these people so that they can receive as much welfare as possible _____
C. It sees the problems of the cities as a national one where farmers are leaving their farms, and coming to the city _____
D. All of the above _____

2. Which anti-poverty agency was set up to train 15 to 22 year olds to get and hold a job:

A. Manpower Training _____
B. Work Experience _____
C. Head Start _____
D. Job Corps _____

3. Which anti-poverty angency was set up to provide special education instruction for children before they enter kindergarten:

A. Operation Mainstream _____
B. Neighborhood Youth Corps _____
C. Head Start _____
D. Vista _____

4. The major idea behind the Model Cities program is to:

A. Try to find new jobs for people who live in the Model City area _____
B. Have a broad range of projects to rebuild and expand housing and job opportunities _____
C. Provide small business loans to people with stores in a Model City area _____
D. All of the above _____

5. Medicare and Medicaid are two types of medical assistance. One medical service not covered by Medicare is:

A. Plastic surgery to improve appearance _____
B. Care of patients while hospitalized _____
C. After hospitalization and home nursing services _____
D. Outpatient care such as X-ray, blood test, etc. _____

6. Under "New Federalism", the federal government started programs to change social conditions in the cities. How have local communities benefited:

A. Federal aid is now available to replace or restore rundown sections of the city and make it a better place to live _____

B. All of the anti-poverty programs have trained people for jobs so they can go "off welfare" _____

C. Economic Opportunity loans have helped small businesses get started _____

D. All of the above _____

7. The Manpower Development and Training Act (MDTA), is:

A. Aimed at reducing taxes in the cities _____

B. Aimed at providing college training for semi-skilled workers _____

C. A part of the New Deal Program _____

D. Basic educational training programs administered by state employment services _____

8. A disadvantaged pre-school child would most likely be in a:

A. New Careers Program _____

B. Head Start Program _____

C. Neighborhood Youth Corps Program _____

D. None of the above _____

Answer Key

1. c	3. c	5. a	7. d
2. d	4. b	6. c	8. b

Unit 5 Functions and Duties of Workers

1. **Social and economic workers have three basic good approaches. Which of the following is not one of the approaches used:**
   A. An individual worker deals with another individual ____
   B. An individual worker deals with a group ____
   C. A group of workers deal with a group that needs help ____
   D. An individual worker deals with a local community ____

2. **A drug counselor called ten drug users together to talk about their common situation: He would be using which type of social service work:**
   A. Case work ____
   B. Group work ____
   C. Community organization ____
   D. None of the above ____

3. **In which of the following areas would a worker try to strengthen family life, and help clients to get along better in everyday life:**
   A. Education service ____
   B. Health service ____
   C. Child welfare service ____
   D. Family service ____

4. **An unmarried mother who wanted to place her child up for adoption would see which type of worker**
   A. Education Specialist ____
   B. Health Aide ____
   C. Child Welfare Worker ____
   D. Psychologist ____

5. **Most entry-level workers in social and economic services:**
   A. Provide in-depth counseling services ____
   B. Provide direct assistance to individuals or groups ____
   C. Provide supervisory and administrative duties for social service agencies ____
   D. Have little contact with individuals needing assistance ____

6. **A common goal of all of the various social and economic service agencies is:**
   A. To provide employment assistance ____
   B. To provide financial assistance ____
   C. To help people who need assistance in solving their problems ____
   D. All of the above ____

7. A common way for social workers to get information about a client is:

A. The interview _____
B. Psychologival test _____
C. Police reports _____
D. Ask neighbors about the client _____

8. If you were giving advice to parents on child care and rearing, and counseling children, you would be working in:

A. Education _____
B. Family Sevice _____
C. Child Welfare _____
D. Health Services _____

9. The salary for most entry-level workers in the field of social and economic services is:

A. Under $3,000 a year _____
B. Under $6,000 a year _____
C. Over $8,000 a year _____
D. Over $10,000 a year _____

Answer Key

1. c	4. c	7. a
2. b	5. b	8. c
3. d	6. c	9. b

Unit 6 Profile and Recommended Qualifications of Workers

1. More and more high school graduates are working in the social and economic services because:

A. A person's attitudes, values, and willingness to work are felt to be as important as college training _____

B. The agency can hire these persons at a far lower salary _____

C. College training is seen as very important _____

D. All of the above _____

2. Which of these characteristics should a worker in the social and economic field have to be successful:

A. Consideration of others' feelings _____

B. Willing to work together with others _____

C. Willing to hear other points of view without getting angry _____

D. All of the above _____

3. In general, a professional level worker in social care work has:

A. An associate of arts degree _____

B. A bachelor's degree in social work _____

C. A master's degree in social work _____

D. A doctorate in social work _____

4. Which of the following is not a quality that a worker in the social and economic field should have:

A. Becomes angry easily when someone says something he doesn't like _____

B. Plans an effective program of work _____

C. Gets along with others _____

D. None of the above _____

5. A recent employment trend in social and economic services is to:

A. Require more people to get a doctorate _____

B. Change requirements to permit entry-level jobs with less formal education _____

C. Require a master's degree in social work for all beginning employees in social service work _____

D. None of the above _____

Answer Key

1. a
2. d
3. b
4. a
5. b

Unit 7 Career Lattices and Employment Prospects

1. A career lattice is best defined as:

A. A series of job opportunities _____

B. A series of jobs that a worker climbs through a combination of education and experience _____

C. A system for keeping track of a category of careers _____

D. A system of employment outlook _____

2. In the Social Welfare career lattice, which is a preprofessional (entry level) job:

A. Case worker representative _____

B. Social worker _____

C. Welfare worker _____

D. None of the above _____

3. Employment in the social and economic service field is growing at a rate of:

A. 2% a year _____

B. 6% a year _____

C. 14% a year _____

D. 20% a year _____

4. In the Community Organization Career Lattice, which is a preprofessional entry level job:

A. Social Worker _____

B. Community Organization Specialist _____

C. Neighborhood Information Officer _____

D. Neighborhood Information Aide _____

5. In the Employment Service Worker career lattice, which is a preprofessional entry level job:

A. Clerk typist _____

B. Employment Aide _____

C. Claims Clerk _____

D. Employment office supervisor _____

6. There is a shortage of well-qualified workers in the social, economic, and employment services. This is caused by:

A. Increased need for social and economic services _____

B. The fact that many jobs become obsolete and the worker has to be retrained _____

C. The many pressures of overcrowding in the cities _____

D. All of the above _____

7. **If you want to find out about careers in social and economic services, you would not check with:**
   A. The American Psychological Corporation _____
   B. The American Personnel and Guidance Association _____
   C. The Commission for Social Work Careers _____
   D. The Environmental Protection Agency _____

Answer Key

1. b	5. b
2. a	6. d
3. b	7. d
4. d	

Unit 1 Nature of the Field

1 Which of these job classifications is a preprofessional position:
- A. Teacher _____
- B. Principal _____
- C. Vice-Principal _____
- D. Teacher Aide _____

2. Which of these job families is not an Educational Service:
- A. Libraries _____
- B. Examinations _____
- C. Museums _____
- D. Teaching _____

3. Which worker is not employed in the Educational Services employment group:
- A. Librarian _____
- B. Examiner _____
- C. Curator _____
- D. Teacher _____

4. How many people work in Educational Service:
- A. Over 700,000 _____
- B. Over 1,000,000 _____
- C. Over 2,000,000 _____
- D. Over 4,000,000 _____

5. A new trend in Educational Service has been:
- A. Entry of work experience _____
- B. Vocational education _____
- C. Entry of preprofessional personnel _____
- D. None of the above _____

6. Most librarians work in:
- A. Cities and counties _____
- B. Schools _____
- C. University _____
- D. State governments _____

7. The largest number of people working in any one profession are:
- A. Doctors _____
- B. Lawyers _____
- C. Scientists _____
- D. Teachers _____

Answer Key

1. d
2. b
3. b
4. d
5. c
6. a
7. d

Unit 2 Basic Introduction to Educational Services

1. **Junior College provides one type of training for students:**
   A. Advanced high school studies _____
   B. Advanced vocational training _____
   C. Replaces high school training _____
   D. None of the above _____

2. **In 1917 the Smith-Hughes Act provided federal funds to assist states in setting up courses in:**
   A. Agriculture _____
   B. Home Economics _____
   C. Industrial Arts _____
   D. All of the above _____

3. **Some of the specific responsibilites of the Office of Education are:**
   A. Collect and analyze statistics and facts _____
   B. Administer grants _____
   C. Advise on school organizations, administration, and methods of teaching _____
   D. All of the above _____

4. **The State's educational organization is usually composed of:**
   A. State Board or Council of Education _____
   B. Superintendent of Education _____
   C. State Department of Education or Public Instruction _____
   D. All of the above. _____

5. **In which one of the main divisions of public education are you presently enrolled:**
   A. Pre-elementary _____
   B. Elementary _____
   C. Secondary _____
   D. Higher education (Junior College) _____

6. **What is the normal age range for elementary school students:**
   A. 5-14 _____
   B. 6-18 _____
   C. 7-11 _____
   D. 14-18 _____

7. **Adult and Continuing Education is provided by several institutions; which one is not considered continuing education:**
   A. Junior College _____
   B. Adult High School _____
   C. High School _____
   D. Technical Institute _____

8. The primary source of revenue for schools comes from:

A. Income tax _____
B. Sales tax _____
C. Property tax _____
D. None of the above _____

9. Libraries have many main functions. Which one of these is not a function of school libraries:

A. Provide instructional reading material _____
B. Provide general reading material _____
C. Provide job placements _____
D. Provide material for cultural organizations _____

10. What two new types of schools came into being during the 20th Century:

A. Elementary schools K-6, and high schools _____
B. Four-year colleges and junior colleges _____
C. Adult schools and high schools _____
D. Junior high schools and junior colleges _____

11. At what educational level do children begin their first school year in junior high school:

A. First grade _____
B. Seventh grade _____
C. Ninth grade _____
D. None of the above _____

12. Educational Services is divided into three main divisions; which one is not a main educational division:

A. Pre-school _____
B. Private schools _____
C. Elementary _____
D. Secondary _____

Answer Key

1. b	4. d	7. c	10. d
2. d	5. c	8. c	11. c
3. d	6. a	9. c	12. b

Unit 3 Function and Duties of Workers

1. Workers in Educational services perform these main categories of duties:
- A. Housekeeping, clerical, and instructional duties _____
- B. Clerical and transportation duties _____
- C. Instructional duties only _____
- D. None of the above _____

2. Some of the first year experience of kindergartener's are:
- A. Play _____
- B. Music and art work _____
- C. Stories and poetry _____
- D. All of the above _____

3. At the Elementary School level, teachers are responsible for teaching and supervising:
- A. Many subjects and activities _____
- B. Lunch and play _____
- C. Just one subject _____
- D. None of the above _____

4. Special teachers give instruction and assist classroom teachers in certain subjects such as:
- A. Art and music _____
- B. Physical Education and Industrial Arts _____
- C. Foreign languages and homemaking _____
- D. All of the above _____

5. What is the average annual "entry level" salary for a preprofessional worker in the field of Educational Services:
- A. $4,000 _____
- B. $2,000 _____
- C. $8,000 _____
- D. $3,000 _____

6. One of the following is not a responsibility of the secondary school teacher:
- A. Plan and develop teaching materials _____
- B. Develop and correct tests _____
- C. Keep records and make reports _____
- D. Find jobs for his students _____

7. Which one of the following could be a duty of the preprofessional worker:
- A. Housekeeping duties _____
- B. Clerical duties _____
- C. Instructional duties _____
- D. Any of the above _____

8. It is possible for a qualified teacher to advance to:

A. Department head or supervisor _____
B. Assistant Principal _____
C. Superintendent _____
D. All of the above _____

9. At the pre-school division the emphasis is on creative expression and socialization, depending on the students' needs. Which duty usually requires professional skills:

A. Preparing play dough _____
B. Taking attendance _____
C. Supervising field trips _____
D. None of the above _____

10. At the secondary level the preprofessional carries out various tasks. Indicate which activity a preprofessional could not perform:

A. Keeping roll book _____
B. Procuring audio-visual equipment _____
C. Teaching a unit in mathematics _____
D. Supervising study halls _____

11. What would you consider the main opportunities for students at the elementary level:

A. Creative expression _____
B. Getting along with others _____
C. Instructional program _____
D. All of the above _____

12. In libraries and museums the work of aides is primarily:

A. Clerical and housekeeping _____
B. Instructional duties _____
C. Shelving books _____
D. Ordering children's books _____

Answer Key

1. a	4. d	7. d	10. c
2. d	5. a	8. d	11. d
3. a	6. d	9. d	12. a

Unit 4 Profile and Recommended Qualifications of Workers

1. Typical Educational Services occupational career lattices include:
- A. Teacher, Counselor Aide, Home School Associate ____
- B. School Assistant, Teacher Associate, Librarian ____
- C. Teacher Aide, Teacher Assistant, Teacher Associate ____
- D. All of the above ____

2. The age level varies, but what is considered the usual age range for public service workers:
- A. 18-30 ____
- B. 22-55 ____
- C. 21-31 ____
- D. 30-65 ____

3. It would be correct to assume that at the preprofessional level most educational services workers would have:
- A. A high school diploma ____
- B. Some college education ____
- C. A General Education Diploma certificate ____
- D. Any one of the above ____

4. To qualify as a professional librarian, one must be a graduate from:
- A. A four year college (B.A. in Library Science) ____
- B. A library school (M.A. in Library Science) ____
- C. A Junior College ____
- D. Any accredited High School ____

5. A professional librarian would be able to:
- A. Supervise teachers ____
- B. Supervise library clerical staff ____
- C. Supervise pre-school instructors ____
- D. All of the above ____

6. Which teachers specialize in a particular subject:
- A. Pre-school level ____
- B. Elementary level ____
- C. Secondary level ____
- D. None of the above ____

Answer Key

1. c	3. d	5. b
2. b	4. b	6. c

Unit 5 Career Lattices and Mobility

1. Identify "entry level" by choosing the right requirement:

A. Minimal skills and education-prior work experience not needed ____
B. No formal academic experience required ____
C. One full year of work experience ____
D. One year of on the job training ____

2. What is considered an entry level position in Educational Services:

A. Clerk Typist ____
B. Library Aide ____
C. Teacher Aide ____
D. All of the above ____

3. What is the entry level position in Library Services:

A. Librarian I ____
B. Clerk Typist ____
C. Library Aide ____
D. Teacher Aide ____

4. Choose the correct career lattice for a library staff:

A. Library Associate, Library Aide, Librarian, Library Clerk ____
B. Library Clerk, Library Assistant, Library Aide, Librarian ____
C. Library Aide, Library Clerk, Librarian Associate, Librarian ____
D. Librarian Aide, Library Associate, Library Aide, Library Clerk ____

5. Indicate which career lattice is correct for a Museum:

A. Curator, Museum Associate, Museum Assistant, Museum Aide ____
B. Curator, Museum Assistant, Museum Aide, Museum Associate ____
C. Museum Aide, Curator, Museum Assistant, Museum Associate ____
D. Museum Aide, Museum Assistant, Museum Associate, Curator ____

6. The duties of a curator would usually be performed in a:

A. Library ____
B. Museum ____
C. School ____
D. Smoke House ____

7. Which position is not an entry level job:

A. Librarian Aide ____
B. Curator Trainee ____
C. Teacher ____
D. Counselor Aide ____

Answer Key

1. a
2. d
3. c
4. c
5. d
6. b
7. c

Unit 6 Employment Prospects

1. Choose one which is not a source of Educational Service information:

A. The Occupational Outlook Handbook _____
B. Occupational Outlook Quarterly _____
C. Environmental Conservation _____
D. Careers in Education with your Federal Government _____

2. Teachers needed help in the classroom. The result has been;

A. Higher pay for teachers _____
B. The preprofessional movement in education _____
C. Psychological services for teachers _____
D. All of the above _____

3. The turnover in educational jobs has been as high as:

A. 2 per cent _____
B. 6 per cent _____
C. 10 per cent _____
D. 20 per cent _____

4. Recent trends in the Educational Services indicate that:

A. The manpower crisis has come to an end _____
B. The manpower crisis is worse than ever _____
C. No entry level jobs will be available _____
D. All of the above _____

5. Information on employment in Educational Services can be obtained from:

A. U.S. Office of Education _____
B. State Education Agencies _____
C. U.S. Department of Labor _____
D. All of the above _____

Answer Key

1. c
2. b
3. c
4. a
5. d

Unit 1 Nature of the Field

1. **Major job families such as parks, forests, agriculture, and fish and game are parts of the field of:**
   A. Educational Services _____
   B. Resources Management _____
   C. Rural, Urban, and Community Development _____
   D. Regulatory Services _____

2. **The most common job found in forest management is:**
   A. Forester _____
   B. Ranger _____
   C. Fire Lookout _____
   D. Range Surveyor _____

3. **Which of these job families belong to the field of Resources Management:**
   A. Fiscal, contracts, personnel, public relations information _____
   B. Parks, forests, fish and game, pollution control _____
   C. Law enforcement, courts, corrections, fire protection _____
   D. Highways, public systems, waterways, airways _____

4. **Major job families, such as pollution control, conservation, and forests are parts of the field of:**
   A. Regulatory Services _____
   B. Educational Services _____
   C. Resources Management _____
   D. Transportation Services _____

5. **Among the responsibilities of Resources Management are:**
   A. Preserving environments that belong to the public _____
   B. Managing environments that belong to the public _____
   C. Restoring environments that belong to the public _____
   D. All of the above _____

6. **The field of Resources Management deals with all except one of these areas:**
   A. Timber boundaries and scales, road locations, and custodial _____
   B. Crop production, insect and disease control, and soil analysis _____
   C. Suppression of fires, pollution control, mining claims, and noise abatement _____
   D. Airline maintenance, airline repair stations, and aircraft performance _____

7. **Which of the following is not part of our natural resources**
   A. Forests and rangelands _____
   B Air and water _____
   C. Soil and minerals _____
   D. Airplanes and automobiles _____

8. The main duties of agricultural county agents involve:

A. Evaluating and appraising properties _____
B. Providing technical assistance to farmers _____
C. Protecting natural features and historic monuments _____
D. Surveying agricultual range _____

Answer Key

1. b	3. b	5. d	7. d
2. a	4. c	6. d	8. b

Unit 2 Exploration and Conservation of Natural Resources

1. The actions of Natural Resources Management to correct deficiencies are:
- A. Through the use of large numbers of unemployed people _____
- B. Recognized by conservation leaders in and out of government _____
- C. Caused by the wholesale slaughter of wildlife, particularly in the West and South _____
- D. All of the above _____

2. An example of a replaceable natural resource is:
- A. Minerals _____
- B. Animals (Homo Sapiens) _____
- C. Water _____
- D. None of the above _____

3. The following three categories are used to classify natural resources:
- A. Replaceable, perennial _____
- B. Inexhaustible, irreplaceable, replaceable _____
- C. Annual, bi-annual, perennial _____
- D. Evergreen, deciduous, herbivorous _____

4. Which of the following is an irreplaceable natural resource
- A. Water _____
- B. Minerals _____
- C. Atmosphere _____
- D. Food _____

5. Natural resources are being abused through:
- A. Poor construction practices _____
- B. Indiscriminate mining methods _____
- C. Contamination of sewerage _____
- D. All of the above _____

6. Resources Management became a concern of the government because of:
- A. The Materials Disposal Act, 1947 _____
- B. Efforts of Presidents like Roosevelt and Kennedy _____
- C. A healthy growth in state conservation agencies _____
- D. All of the above. _____

7. Which natural resources are considered to be inexhaustible:
- A. Soil and water _____
- B. Minerals and heat _____
- C. Trees and flowers _____
- D. Leather and grass _____

8. Which of these questions would involve environmental ethics:

A. How can we best reuse our natural resources _____

B. Where and how do we want economic and urban growth _____

C. How can we adjust priorities to insure that we fulfill energy needs without intensifying environmental problems _____

D. All of the above _____

9. A central role of a Resource Manager is to:

A. Protect human and property rights _____

B. Develop individual skills _____

C. Increase opportunities for social and economic betterment among deprived, disadvantaged, and under-employed people _____

D. Change habits and out-of-date viewpoints which have led to current pollution problems and environmental damage _____

Answer Key

1. d	4. b	7. a
2. b	5. d	8. d
3. b	6. d	9. d

Unit 3 Major National Resource Management Concepts

1. The actions of Natural Resources Management are based upon concepts that deal with:

A. Man's dependence upon natural resources ____
B. Man's temporary possession of natural resources ____
C. Both "a" and "b" ____
D. Neither "a" nor "b" ____

2. A concept basic to Natural Resources Management is:

A. Man and natural resources are independent of each other ____
B. Man's control over natural resources is a temporary privilege ____
C. Resources are generally inexhaustible ____
D. Long-range planning is not required ____

3. Natural Resources Management is based upon concepts that are similar to:

A. Man is as much a part of a larger ecosystem as is a deer in the forest ____
B. Man must appropriate the resource and use it ____
C. Man must be independent of his environment ____
D. The future welfare of natural resources should be left to future generations ____

4. Among the causes of the depletion of natural resources — though often not so considered, is:

A. The use of synthetic materials ____
B. The process of photosynthesis ____
C. The reduction of the world's population ____
D. A decrease in the standard of living ____

5. Population expansion and certain negative aspects of research and technology can be viewed as:

A. Threats to the natural resources ____
B. Positive measures to stop depletion of natural resources ____
C. Both "a" and "b" ____
D. Neither "a" nor "b" ____

6. Groups of people with different interest often conflict strongly over the uses of a resource. Pick an example of this:

A. The use of public domain for profit ____
B. The regulation of navigation waters ____
C. The use of arms during war time ____
D. The regulation of liquor sales ____

7. **Power companies that build dams with accompanying power houses are often required to:**
   A. Lease the area waters to local fisherman _____
   B. Release sufficient water to preserve fish life or operate fish hatcheries _____
   C. Allow private individuals the indiscriminate use of area waters _____
   D. Provide "no fishing" signs for the Wildlife Department _____

8. **The conditions which led the government to become involved in Resources Management included:**
   A. Ignorant abuse of land, minerals, and wildlife _____
   B. Conservation leadership by individuals and groups _____
   C. The depression and World War II _____
   D. All of the above _____

Answer Key

1. c	3. a	5. a	7. b
2. b	4. a	6. a	8. d

Unit 4 Governmental Resource Management Organization

1. The Bureau of Mines is a part of what level of government and deals with what natural resource:

A. Federal level, minerals _____
B. Local level, wildlife _____
C. Federal level, forests _____
D. Local level, water _____

2. The Bureau of Land Management is concerned primarily with:

A. Multiple use-grazing, fish and wildlife, timber, water — public land _____
B. Research to appraise the mineral field resources _____
C. Enforcement of water quality standards within a given community _____
D. None of the above _____

3. The Bureau of Reclamation is concerned primarily with:

A. Water and matters dealing with water and its use _____
B. The registry of national landmarks _____
C. The assistance to groups planning recreation sites _____
D. None of the above _____

4. The U.S. Geological Survey has as its primary role:

A. Selection of parks and recreation sites _____
B. Research and appraisal of earth science related activities _____
C. To encourage better fire control methods _____
D. To administer the plans of public agencies in urban areas _____

5. Which of these departments is not involved with Resources Management

A. Department of Labor _____
B. Department of Agriculture _____
C. Department of Commerce _____
D. Department of Urban Development _____

6. The Department of the Interior includes the following bureau:

A. The Air Pollution Service _____
B. The Land and Facilties Development Administration _____
C. The National Park Service _____
D. The Environmental Sciences Administration _____

7. **The Corps of Engineers performs many conservation functions and operates with the following department:**
   A. Department of Commerce _____
   B. Department of Defense _____
   C. Department of Agriculture _____
   D. Department of the Interior _____

Answer Key

1. a	5. a
2. a	6. c
3. a	7. b
4. b	

Unit 5 Career Lattices and Mobility

1. **An example of an entry level job in the field of Resources Management is:**
   A. Part attendant ____
   B. Park Superintendent ____
   C. Resource Management ____
   D. Surveyor

2. **The role of a worker in a given job family can be expected to become more demanding and varied as he progresses up the career lattice. Which of these job sequences best reflects this concept:**
   A. Naturalist, park ranger, forester ____
   B. Gardener, gardener-foreman, supervisor ____
   C. Administrator, court room clerk, clerk typist ____
   D. Sergeant, captain, patrolman ____

3. **Typical entry level jobs in a Park and Recreation Department would be:**
   A. Forester and Surveyor Aide ____
   B. Park Ranger and Recreation Aide ____
   C. Park Aide and Recreation Supervisor ____
   D. Park Aide and Recreation Aide ____

4. **Job opportunities are available in the field of Resources Management to people with which of these educational backgrounds:**
   A. High School Diploma ____
   B. A.A. Degree (Junior College) ____
   C. B.A. Degree (four year college) ____
   D. Any of the above ____

5. **A person obtaining a job as a park attendant would not require the following qualification:**
   A. Two year course at the Community College ____
   B. Good Health ____
   C. Interest in the outdoors ____
   D. Willingness to follow directions ____

6. **An entry level job for secondary school graduates with no prior work experience in Resources Management is:**
   A. Waste water-plant attendant ____
   B. Forester ____
   C. Park Superintendent ____
   D. Department Head for the Bureau ____

7. **A career lattice in many municipal parks departments is:**
   A. Park Planner, Foreman, Supervisor, Superindendent _____
   B. Park Worker, Foreman, Groundsman _____
   C. Groundsman, Supervisor, Foreman, Director _____
   D. Groundsman, Gardener, Foreman, Superintendent _____

Answer Key

1. a	5. a
2. b	6. a
3. d	7. d
4. d	

Unit 6 Manpower Needs in the 1970's

1. **Employment possibilities in Resources Management:**
   A. Look very good in the near future ____
   B. Have never been worse than they are now ____
   C. Will increasingly tend to favor specialists with advanced education and training ____
   D. None of the above ____

2. **The U.S. Department of Labor made projections for several of the job families in Resources Management which showed that:**
   A. Employment in professional and technical occupations will drop considerably ____
   B. A rise in employment will occur among occupations requiring the least education ____
   C. Employment in professional and technical occupations will show the most rapid growth ____
   D. None of the above ____

3. **Most jobs in Resources Management occur through:**
   A. Replacement needs ____
   B. Employment growth in the Resources Management group ____
   C. Political legislation ____
   D. Both A and B ____

4. **The best source for information about careers in Resource Management is:**
   A. U.S. Office of Education ____
   B. U.S. Department of the Interior ____
   C. The Internal Revenue Service ____
   D. All of the above ____

5. **Which professional association produces fact sheets and pamphlets on careers in Resources Management:**
   A. National Recreation and Parks Association ____
   B. The Interstate Commerce Commission ____
   C. The U.S. Federal Highway Administration ____
   D. American Personnel and Guidance Association ____

6. **In Resources Management, professionals are expected to show a more rapid employment growth than preprofessionals. The ratio of professionals to preprofessionals hired is expected to be:**
   A. 1 to 1 ____
   B. 2 to 2 ____
   C. 4 to 1 ____
   D. 6 to 1 ____

Answer Key

1. c	3. d	5. a
2. c	4. b	6. b

Unit 1 Nature of the Field

1. **The major job families within the area of rural, urban, and community development are:**
   A. Community action, acquisition and civil defense _____
   B. Building, zoning, conservation and planning _____
   C. Community action, planning, building, zoning and acquisition _____
   D. Community action, conservation and social services _____

2. **Metropolitan areas will have to pay more taxes to provide municipal services in:**
   A. Water disposal _____
   B. Police protection _____
   C. Mass transportation _____
   D. All of the above _____

3. **Development of skills and knowledge in map preparation, land use studies, and street and highway layouts are some of the concerns of:**
   A. Rural, urban and community development _____
   B. Regulatory services and records _____
   C. Resources Management _____
   D. Social and economic services _____

4. **Which of these are concerns in the field of rural, urban, and community development:**
   A. Chart and map preparation _____
   B. Preparation of community relations material _____
   C. Planning of water, sewer line, street and highway layouts _____
   D. All of the above _____

5. **As a result of our rapid growth in the United States, which statement is true:**
   A. The metropolitan areas are providing more residential areas, schools and shops for the middle and high income _____
   B. The rural, suburban and metropolitan areas work together and depend on one another _____
   C. The suburbs are fast becoming the homes for the poor _____
   D. The metropolitan areas are faced with an increasing amount of open space _____

6. **Workers in the area of rural, urban, and community development are not primarily concerned with:**
   A. Use of land _____
   B. The acquiring of land _____
   C. Unemployment in ghetto areas _____
   D. Transportation _____

Answer Key

1. c	3. a	5. b
2. d	4. d	6. c

Unit 2 Basic Concepts of Rural, Urban, and Community Development

1. The presumed purpose of zoning is not to remodel a community but:

A. To provide specific plans for future cities _____
B. To provide protection for existing developments and some control for future development _____
C. To provide jobs for people interested in urban development _____
D. To provide equal opportunity housing _____

2. Effective zoning would include the following:

A. Legal authority, zoning agencies _____
B. Zoning ordinance preparation and zoning ordinance enactment _____
C. The establishment of a Board of Appeals _____
D. All of the above _____

3. Full title negotiation, installment buying, tax delinquent land, and donation are all methods that might be used in land:

A. Development _____
B. Acquisition _____
C. Planning _____
D. Zoning _____

4. Planning decisions affect:

A. Only the suburbs _____
B. Only the ghetto areas _____
C. Only business enterprises _____
D. All of the above _____

5. Zoning is most effective when done with:

A. A comprehensive opinion survey _____
B. A military plan _____
C. A comprehensive planning program _____
D. Recreation area planning _____

6. The Building Code, with local changes, is based on the nationally adopted:

A. Universal Building Code _____
B. U.S.A. Building Code _____
C. A.A.A. Building Code _____
D. None of the above _____

7. One of the tasks included in zoning might be:

A. Prohibiting the introduction of an industrial business into a residential area _____

B. Prohibiting the building of residences in an industrial area _____

C. Serve as a guide for the development of the community _____

D. All of the above _____

8. Which of these does not indicate a need for community planning:

A. Increased traffic problems _____

B. Pollution _____

C. Need for more schools, homes, and hospitals _____

D. Decrease in government jobs _____

9. Since there is not enough suitable land ideally located to satisfy the demand:

A. Land costs are dropping _____

B. Land costs will remain the same _____

C. Land costs are rising rapidly _____

D. Land costs are being federally controlled _____

Answer Key

1. b	4. d	7. d
2. d	5. c	8. d
3. b	6. a	9. c

Unit 3 Functions and Duties of Workers

1. Some of the key considerations in urban renewal planning are:
- A. Relocation of present residents and businesses _____
- B. Rehabilitation of old but structurally sound buildings _____
- C. Demolition of unsound structures _____
- D. All of the above _____

2. Experts in urban design often work on large projects such as:
- A. Private home planning _____
- B. Churches _____
- C. Groups of public buildings _____
- D. Private timber land development _____

3. Which is an example of an administrative responsibility in the field of rural, urban, and community development:
- A. Legal aspects of rural, urban, and community development: _____
- A. Legal aspects of rural, urban, and community development; _____
- C. Coordination of public and private activities _____
- D. All of the above _____

4. Prior to 1960, much of governmental planning was concentrated in:
- A. Urban areas _____
- B. Rural areas _____
- C. Suburban areas _____
- D. All of the above _____

5. Rural or urban development usually proceeds in specific steps. They are:
- A. Analysis of problems and goals _____
- B. Stating goals, and designing alternatives _____
- C. Evaluating alternatives, and making recommendations _____
- D. All of the above _____

6. Salaries of entry level workers in rural, urban and community development range from:
- A. $3,000 to $5,000 per year _____
- B. $3,500 to $6,000 per hear _____
- C. $4,500 to $8,000 per year _____
- D. $8,600 to $28,000 per year _____

Answer Key

1. d	3. d	5. d
2. c	4. b	6. c

Unit 4 Recommended Qualifications of Workers

1. In some cases it is possible to start work at age 16 as:
- A. Draftsman, Planning Coordinator ____
- B. Drafting tracer, Surveyor's rod man ____
- C. Surveyor, Building Inspector ____
- D. Investigator, Special Services Aide ____

2. Which of these positions is gained by years of experience on the job, and not necessarily by formal education:
- A. Building Inspector ____
- B. Building Manager ____
- C. Senior Draftsman ____
- D. All of the above ____

3. Most state and local government positions are filled by
- A. Recommendations ____
- B. Some form of Civil Service Test ____
- C. Personnel Director ____
- D. Lottery ____

4. Entry level jobs for community action at the preprofessional level usually require:
- A. High school diploma or equivalent ____
- B. B.A. Degree ____
- C. M.A. Degree ____
- D. None of the above ____

5. A person wanting a more technical or professional job can acquire the training in:
- A. High school, technical institutes ____
- B. Extension divisions of colleges and universities ____
- C. Correspondence schools ____
- D. All of the above ____

6. One of these occupations does not come under the job family of acquisition:
- A. Establishing boundaries ____
- B. Protection of public properties ____
- C. Mapping ____
- D. Protection of private properties ____

7. **The usual working age range for rural, urban and community development is:**
   A. 14-65 _____
   B. 16-70 _____
   C. 18-70 _____
   D. 21-41 _____

8. **Entry level jobs in planning typically call for experience or familiarity with:**
   A. Drafting _____
   B. Illustrating _____
   C. Modelmaking _____
   D. All of the above _____

9. **The following are duties for preprofessionals in planning:**
   A. Assist in mapping and drafting _____
   B. Assist in designing and engrossing _____
   C. Assist in modelmaking _____
   D. All of the above _____

Answer Key

1. b	4. a	7. c
2. d	5. d	8. d
3. b	6. d	9. d

Unit 5 Career Lattices and Job Mobility

1. Entry level jobs in rural, urban, and community development are:
- A. Building Inspector, Draftsman, Engrossing Clerk ____
- B. Building Inspector Aide, Surveyor, Chief Building Guard ____
- C. Building Inspector Trainee, Engineering Aide ____
- D. Draftsman, Surveyor, and Chief Building Guard ____

2. Examples of preprofessional entry level jobs in community action are:
- A. Project Manager, Building Inspector ____
- B. Urban Renewl Aide, Storekeeping Clerk, Community Program Aide ____
- C. Engineering Aide, Modelmaker ____
- D. All of the above ____

3. One of these jobs would not be available as a preprofessional entry level job in the field of planning:
- A. Planning Aide ____
- B. Modelmaker ____
- C. Junior Architect ____
- D. Building Inspector Trainee ____

4. A typical preprofessional entry level job in Building and Zoning is:
- A. Storekeeping Clerk ____
- B. Modelmaker ____
- C. Engineering Aide ____
- D. Junior Architect ____

5. A typical career lattice in building and zoning is:
- A. Building Inspector, Building Code Field Representative, Planning Coordinator ____
- B. Building Inspector Trainee, Building Inspector Aide, Building Inspector, Building Code Field Representative ____
- C. Building Inspector, Trainee, Principal Draftsman, Messenger, Draftsman ____
- D. Building Inspector Trainee, Senior Draftsman, Planning Aide ____

6. The correct order or sequence for a typical career lattice in Urban Renewal is:
- A. Urban Renewal Aide, Coordinator of Projects, Project Manager Investigator ____
- B. Urban Renewal Aide, Special Services Aide, Program Planner ____
- C. Urban Renewal Aide, Investigator, Project Planner, Project Manager, Coordinator of Projects ____
- D. Urban Renewal Aide, Field Representative, Community Program Aide, Chief Planner ____

7. The correct order or sequence for a typical career lattice in planning is:

A. Planning Aide, Planning Coordinator Trainee, Planning Coordinator, Senior Planning Coordinator, Principal Planning Coordinator, Chief Planner _____

B. Planning Aide, Senior Planning Coordinator, Chief Planner, Principal Draftsman _____

C. Planning Aide, Building Inspector, Planning Coordinator, Chief Planner _____

D. None of the above _____

8. Job mobility in rural, urban, and community development refers to:

A. The fact that you have to move around a lot in these jobs _____

B. The fact that these jobs themselves move around a lot _____

C. Upward movement through the career lattice in the occupational group _____

D. None of the above _____

Answer Key

1. c	3. d	5. b	7. a
2. b	4. c	6. c	8. c

Unit 6 Employment Prospects

1. Aides in building and zoning do not:
- A. Participate in housekeeping _____
- B. Participate in caretaking _____
- C. Participate in maintaining records _____
- D. Participate in designing _____

2. Which would be a good source of information concerning job outlook in rural, urban, and community development:
- A. Regional Office, Bureau of Labor Statistics _____
- B. American Federation of Technical Engineers _____
- C. American Institute of Planners _____
- D. All of the above _____

3. The most readily available sources of information on employment are:
- A. School guidance offices and the local newspaper classified columns _____
- B. State Employment Office _____
- C. State Labor Department _____
- D. None of the above _____

4. The Bureau of Labor Statistics publishes this journal as a source of information on jobs:
- A. The A.A.A. Journal _____
- B. American Institute of Architects _____
- C. Occupational Outlook Quarterly _____
- D. American Federation of Technical Engineers _____

5. Which statement concerning job opportunities in rural, urban and community development would be true:
- A. There are too many university graduates in planning _____
- B. Recently it was estimated that there were only 600 university graduates to fill 8,000 job vacancies _____
- C. There will be no job vacancies for the college graduates _____
- D. None of the above _____

6. The job openings in the area of rural, urban, and community development are:
- A. Expanding — and will continue to employ more and more workers _____
- B. Decreasing — Preprofessional jobs will be the first to go _____
- C. Stabilizing — no new positions will be made available _____
- D. None of the above _____

7. **Which is not a direct cause for the rise in job openings in rural, urban, and community development:**
   A. Growth of the suburbs _____
   B. Preservation of open spaces _____
   C. Shifting housing and working pattersn _____
   D. Growing tax rate _____

8. **This will create a need for a great number of workers in rural, urban, and community development:**
   A. Construction of new cities _____
   B. Development of transportation systems _____
   C. Need for recreation and open areas _____
   D. All of the above _____

Answer Key

1. d	3. a	5. b	7. d
2. d	4. c	6. a	8. d

Unit 1 Primary Functions of Public Safety, Corrections, and Judicial Services

1. The three major branches in the American system of government are:
- A. Legislative, Congress, Judicial _____
- B. Judicial, Executive, Courts _____
- C. Executive, Legislative, Judicial _____
- D. Executive, Congress, President _____

2. The making of a law is primarily the responsibility of which major branch of government?
- A. Executive _____
- B. Legislative _____
- C. Judicial _____
- D. None of the above _____

3. The administration of the law is primarily the responsibility of which major branch of government?
- A. Executive _____
- B. Legislative _____
- C. Judicial _____
- D. Congress _____

4. The job of the judicial branch of government with regard to the law is to:
- A. Apply _____
- B. Comply _____
- C. Judge _____
- D. All of the above _____

5. The primary function of police officers is to:
- A. Enforce the law _____
- B. Correct the law _____
- C. Interpret the law _____
- D. All of the above _____

6. Persons associated with the fields of Public Safety, Corrections, and Judicial Services are concerned with:
- A. Protection of human rights _____
- B. Protection of property rights _____
- C. Resolution of conflicts related to property and human rights _____
- D. All of the above _____

7. **The enforcement of the law is primarily the responsibility of which major branch of government?**
   A. Executive _____
   B. Legislative _____
   C. Judicial _____
   D. Congress _____

8. **The fields of Public Safety, Corrections, and Judicial Services deal with the following:**
   A. Health _____
   B. Safety _____
   C. Welfare _____
   D. All of the above _____

9. **Which one of these fields of Public Safety, Corrections, and Judicial Services is a major job family:**
   A. Fire protection _____
   B. Courts _____
   C. Probation _____
   D. Regulatory services _____

Answer Key

1. c	4. d	7. a
2. b	5. a	8. d
3. a	6. d	9. d

Unit 2 Background, Organization, and Operations - Public Safety, Corrections, and Judicial Services

1. **A major difference between local and state law enforcement agencies, and federal law enforcement agencies is:**
   A. Geographic boundaries _____
   B. Narcotics bureaus _____
   C. Criminal arrests _____
   D. All of the above _____

2. **Automobile traffice control is primarily the responsibility of the law enforcement agency at what government level:**
   A. Federal _____
   B. Local _____
   C. National _____
   D. All of the above _____

3. **American police and fire prevention forces are controlled to what degree by the federal or central government:**
   A. None _____
   B. About half _____
   C. Completely _____
   D. All of the above _____

4. **Among the agencies that have statewide jurisdiction are:**
   A. Narcotics bureaus _____
   B. Alcoholic control departments _____
   C. Highway patrols _____
   D. All of the above _____

5. **The municipal police department must accomplish which of the following tasks in order to accomplish its mission:**
   A. The protection of the people _____
   B. The prevention of criminal activity _____
   C. The arrest of law violators _____
   D. All of the above _____

6. **Which of the following is not one of the major tasks of municipal police department:**
   A. The performance of public duties _____
   B. Investigation of federal income tax offenders _____
   C. The repression of criminal activity _____
   D. The regulation of the people in their non-criminal duties _____

7. **Typically, administrative units of a police department include all but one of the following:**
   A. Office of the Chief _____
   B. Superior court judges _____
   C. Departmental divisions _____
   D. Special units _____

8. **The major divisions of police operations include all but one of the following:**
   A. Patrol _____
   B. Investigative process _____
   C. Traffic supervision _____
   D. Jury trials _____

9. **One of the main functions of patrol operations is to:**
   A. Prevent crimes from happening _____
   B. Prepare cases for the prosecution _____
   C. Keep records of crimes and criminals _____
   D. Assume responsibility for individuals on parole or probation _____

10. **All of the following have law enforcement duties; which is not a federal agency:**
   A. Department of Automobile Traffic Control _____
   B. Department of Treasury _____
   C. Department of Justice _____
   D. Department of Defense _____

Answer Key

1. a	3. a	5. d	7. b	9. a
2. b	4. d	6. b	8. d	10. a

Unit 3 The Judicial System in America

1. The two main branches of the Judicial system in America are:
- A. Local and federal _____
- B. Misdemeanor and felony _____
- C. Civil and criminal _____
- D. Jury and judge _____

2. Private disputes between people, which usually are resolved with one party owing another, are handled by which branch of the Judicial system:
- A. Federal _____
- B. Felony _____
- C. Misdemeanor _____
- D. Civil _____

3. A person robbing a store will have his case handled by which branch of the Judicial system:
- A. Federal _____
- B. Criminal _____
- C. Misdemeanor _____
- D. Judge _____

4. The criminal justice system is divided into two categories:
- A. Local and federal _____
- B. Misdemeanor and felony _____
- C. Jury and civil _____
- D. Federal and felony _____

5. The concept of justice in the past saw emphasis on revenge; today greater emphasis is placed on:
- A. Punishment _____
- B. Extinction _____
- C. Rehabilitation _____
- D. Tolerance _____

6. Govermental systems of providing justice involve specific duties for each agency. Which of these agencies is not correctly matched with duty:
- A. Police — apprehension _____
- B. Judge and jury — impartial decision _____
- C. Correctional officer — housing and rehabilitation _____
- D. Parole and probation office — persuades others of suspect's guilt _____

7. **Which of these represents a correct sequence of steps in the criminal justice system in America:**
   A. Police, prosecutor, jail _____
   B. Police, jail, pre-trial release _____
   C. Police, arraignment, probation, jail _____
   D. Police, parole, arraignment _____

8. **The parole step of the criminal justice system involves:**
   A. Helping to keep the ex-convict out of trouble _____
   B. Helping the ex-convict engage in constructive activities _____
   C. Job referral systems _____
   D. All of the above _____

9. **A major difference between probation and parole is that probation:**
   A. Occurs instead of going to jail _____
   B. Just before going to jail _____
   C. While in jail _____
   D. For a specified period after jail _____

Answer Key

1. c	4. b	7. b
2. d	5. c	8. d
3. b	6. d	9. a

Unit 4 Functions and Duties of Workers and Working Conditions

1. A city policeman would not usually:
- A. Investigate crimes ____
- B. Help an accident victim ____
- C. Patrol a local state highway ____
- D. Patrol local city streets ____

2. Which service would most likely be performed by a state policeman rather than a city policeman:
- A. Advise motorists on highway traffic conditions ____
- B. Prosecute criminal offenders ____
- C. Direct traffic around an accident ____
- D. Investigate crimes ____

3. Most firefighters are employed at which level of government:
- A. Local ____
- B. State ____
- C. Federal ____
- D. None of the above ____

4. Firefighters, in addition to putting out fires, also:
- A. Inspect buildings ____
- B. Dry firehoses ____
- C. Help people to safety ____
- C. All of the above ____

5. Among the duties performed by workers in the fields of Public Safety, Corrections, and Judicial Services are:
- A. Alcoholic beverage control inspectors ____
- B. Department of Motor Vehicles investigators ____
- C. Narcotics investigators ____
- D. All of the above ____

6. Which of the following duties is usually not performed by the city police:
- A. Investigating a housebreaking ____
- B. Fingerprint classification ____
- C. Traffic patrol duty ____
- D. Checking the weight of commercial vehicles ____

7. If police work a 10/4 plan, they:
- A. Work 4 hours a day for 10 straight days ____
- B. Work 10 hours a day for 4 straight days ____
- C. Work in groups of either 10 or 4 policemen ____
- D. Have a better chance of being promoted ____

8. Firefighters usually work:

A. 24 hours on, 24 hours off with an extra day off at intervals _____

B. 24 hours on, 48 hours off with an extra day off at intervals _____

C. A normal 40-hour week _____

D. All of the above _____

Answer Key

1. c	3. a	5. d	7. b
2. a	4. d	6. d	8. a

Unit 5 Recommended Qualifications of Workers

1. The maximum age level for employment in most police or fire departments is:

A. 16 or 18 _____
B. 18 or 21 _____
C. 21 or 25 _____
D. 25 or 30 _____

2. Qualifications for workers in the fields of public safety, corrections, and judicial services include which of the following elements:

A. Minimum age requirements _____
B. Minimum education requirements _____
C. Specific physical requirements _____
D. All of the above _____

3. Due to civil service rules, very few individuals would be able to begin a career in law enforcement or firefighting over the age of:

A. 20 _____
B. 30 _____
C. 40 _____
D. 50 _____

4. Employment requirements for a fire dispatcher and fireman include:

A. A probationary period _____
B. A college degree _____
C. Minimum age of 25 _____
D. All of the above _____

5. Among the requirements for a firefighter is the ability:

A. To distinguish effectively between colors _____
B. To do specific physical activities in a certain amount of time _____
C. To pass a civil service examination _____
D. All of the above _____

6. A high school education will qualify the individual for all but one of these job families:

A. Law enforcement _____
B. Fire protection _____
C. Probation _____
D. None of the above _____

Answer Key

1. b	3. c	5. d
2. c	4. a	6. c

Unit 6 Career Lattices and Mobility

1. An entry level worker in law enforcement would be called:
- A. A police officer ____
- B. A patrolman aide trainee or police cadet ____
- C. A patrol supervisor ____
- D. A police sergeant ____

2. Entry level fire protection work might include:
- A. Maintaining equipment ____
- B. Operating a ladder truck ____
- C. Supervising a chemical fire ____
- D. Working as a para-medic ____

3. The correct law enforcement career lattice is:
- A. Aide, sergeant, lieutenant, captain ____
- B. Aide, lieutenant, policeman, sergeant ____
- C. Policeman, sergeant, lieutenant, captain ____
- D. Aide, policeman, sergeant, lieutenant ____

4. The correct fire protection career lattice is:
- A. Firefighter, engineer, lieutenant ____
- B. Fire dispatcher, engineer, lieutenant ____
- C. Firefighter, captain, fire chief ____
- D. None of the above ____

5. The correct career lattice for the courts is:
- A. Legal stenographer, deputy clerk, assistant administrator ____
- B. Clerk typist, deputy clerk, courtroom clerk ____
- C. Clerk typist, legal stenographer, deputy clerk ____
- D. Deputy clerk, courtroom clerk, administrator ____

6. Real courts have all the following except:
- A. Civil court ____
- B. Moot court ____
- C. Criminal Court ____
- D. Traffic Court ____

7. A psychologist would most likely be working in:
- A. Fire protection ____
- B. Police protection ____
- C. Corrections ____
- D. Courts ____

Answer Key

1. b
2. a
3. d
4. d
5. c
6. b
7. c

Unit 7 Employment Prospects

1. **Information about employment can be obtained in law enforcement and firefighting at:**
   A. State employment offices _____
   B. County employment offices _____
   C. Municipal employment offices _____
   D. All of the above _____

2. **Most workers in probation and parole work for the:**
   A. State and federal government _____
   B. County and state government _____
   C. City and federal government _____
   D. None of the above _____

3. **The employment outlook for people in the field of public safety is:**
   A. Increasing _____
   B. About the same as it was in 1960 _____
   C. Declining _____
   D. Fluctuating _____

4. **The rapid increase in the number of registered motor vehicles has the most direct effect on:**
   A. City police _____
   B. County sheriff _____
   C. Highway patrol _____
   D. Federal police _____

5. **Which work best describes the need for qualified correctional workers:**
   A. None _____
   B. Small _____
   C. Great _____
   D. Few _____

6. **An individual would most likely do seasonal work during the summer for the:**
   A. U.S. Forest Service _____
   B. County Probation Office _____
   C. City Fire Department _____
   D. State Police Department _____

Answer Key

1. d	3. a	5. c
2. b	4. c	6. a

Unit 1 Nature of the Field

1. **Regulatory Services may be defined as services which:**
   - A. Help control the flow of traffic on highways ____
   - B. Establish the rules and regulations of the military services ____
   - C. Protect the public welfare from unfair rates and regulations ____
   - D. None of the above ____
2. **Regulatory Services grew out of a need for the government to:**
   - A. Control the lives of people ____
   - B. Control both government and private businesses because they cannot be trusted ____
   - C. Establish health and safety standards to protect all people ____
   - D. Control services and products which are required for the public need ____
3. **The first Regulatory Services appeared in:**
   - A. City agencies ____
   - B. State agencies ____
   - C. County agencies ____
   - D. Federal agencies ____
4. **Which is not a function of Regulatory Services:**
   - A. Regulate the amount of money spent by the consumer ____
   - B. Protect the consumer ____
   - C. Determine fair rates and services ____
   - D. Set standards for services and protects ____
5. **As our country became more industrialized:**
   - A. Regulatory Services were no longer needed ____
   - B. Regulatory Services grew to help protect the people ____
   - C. People moved back to the farm ____
   - D. People had fewer products to choose from ____
6. **Which is a function of Regulatory Services:**
   - A. Operate ferries and bridges ____
   - B. Operate public utilities ____
   - C. Protect the people ____
   - D. Protect large businesses ____
7. **An example of a Regulatory Service Agency is:**
   - A. Association of American Colleges ____
   - B. Boy Scouts of America ____
   - C. Interstate Commerce Commission ____
   - D. International Red Cross ____

8. In which job family would a worker in Regulatory Services not be found:

A. Counseling and rehabilitation _____

B. Taxation and public records _____

C. Inspection and examination _____

D. License and customs _____

Answer Key

1. c	3. b	5. b	7. c
2. d	4. a	6. c	8. a

Unit 2 Regulatory Services and their Functions

1. **Regulatory Service Agencies can be found in:**
   A. The Executive branch of the federal government _____
   B. Independent agencies of the federal government _____
   C. State agencies _____
   D. All of the above _____
2. **A justice department worker would least likely be concerned with:**
   A. Conducting investigations _____
   B. Detecting violations of the law _____
   C. Collecting and evaluating evidence _____
   D. Regulating and supervising all national banks _____
3. **Which department is primarily concerned with Regulatory Services:**
   A. Transportation Department _____
   B. Park and Recreation Department _____
   C. Social Service Department _____
   D. None of the above _____
4. **One of the main functions of the Department of Health, Education and Welfare is to:**
   A. Regulate purity, safety, and accurate labeling of certain foods and drugs _____
   B. Regulate importation of crude oil _____
   C. Administer trading and pricing on commodity exchanges _____
   D. All of the above _____
5. **Which of these Regulatory Agencies would not be a state agency:**
   A. Department of Motor Vehicles _____
   B. Federal Trade Commission _____
   C. Real Estate _____
   D. All of the above _____
6. **A main role of the Public Utilities Commission is to:**
   A. Enforce the Automobile Sales Finance Act _____
   B. Establish laws relating to foods or drugs _____
   C. Establish rates and regulate the public utilities _____
   D. Promote and safeguard the interests of the consumer _____
7. **The idea of Regulatory Services grew out of:**
   A. The needs of politicians _____
   B. The needs of the people _____
   C. The needs of capitalists _____
   D. The needs of public utility companies _____

Answer Key

1. d
2. d
3. a
4. a
5. b
6. c
7. b

Unit 3 Functions and Duties of Workers

1. **One job that could probably be found in most phases of the broad field of Regulatory Services is:**
   A. Administrative Assistant _____
   B. Special Agent _____
   C. Dairy Foods Inspector _____
   D. Immigration Inspector _____

2. **Which job family would be included in the field of Regulatory Services:**
   A. Taxation _____
   B. Inspection _____
   C. Customs and immigration _____
   D. All of the above _____

3. **Special agents, collection revenue officers, and accounting technicians would most likely belong in the:**
   A. Examination job family _____
   B. License job family _____
   C. Census job family _____
   D. Taxation job family _____

4. **Most of the duties of the public records job family are:**
   A. Investigative _____
   B. Clerical _____
   C. Personal _____
   D. All of the above _____

5. **Which of the following jobs would not be found in the inspection job family:**
   A. Food and Drug Inspector _____
   B. Building Inspector _____
   C. Dairy Foods Inspector _____
   D. None of the above _____

6. **An individual who checks on the financial status of insurance companies and banks is working in which job family of Regulatory Services:**
   A. Recreation _____
   B. Examination _____
   C. Law Enforcement _____
   D. Inspection _____

7. **A list of entry level jobs in Regulatory Services consists of:**
   A. Traffic checker, street maintenance, guard _____
   B. Water pollution aide, park worker, fire lookout _____
   C. Humane officer, license interviewer, customs aide _____
   D. Education aide, social service aide, library helper _____

Answer Key

1. a	5. d
2. d	6. b
3. d	7. c
4. b	

Unit 4 Recommended Qualifications of Workers

1. Because of the specialized nature of regulatory services and records:
- A. Many entry level positions require either an associate, baccalaureate, or even law degree _____
- B. Many entry level positions are filled by high school graduates _____
- C. Many positions in this career family go vacant each year _____
- D. All of the above _____

2. A "tax auditor" would most likely have:
- A. A high school diploma _____
- B. An associate of arts degree in accounting _____
- C. A baccalaureate degree in accounting _____
- D. A doctor's degree in accounting _____

3. If you wanted to work in the field of regulatory services it would be a good idea to:
- A. Get as much education as you can _____
- B. Study business administration _____
- C. Study accounting and law _____
- D. All of the above _____

4. A skill needed by many in the regulatory services field is:
- A. Teaching ability _____
- B. Investigative or examination skills _____
- C. Knowledge of contracts and conservation _____
- D. None of the above _____

5. A hearing examiner working in the regulatory service field is:
- A. A lawyer _____
- B. A special agent _____
- C. An audiologist _____
- D. A noise pollution specialist _____

6. A job in Regulatory Services that a high school graduate could perform is:
- A. Hearing Examiner _____
- B. Tax Auditor _____
- C. Dairy Foods Inspector _____
- D. Public Records Clerk _____

Answer Key

1. a	3. d	5. a
2. c	4. b	6. d

Unit 5 Career Lattices and Employment Prospects

1. Salary opportunities for most persons in Regulatory Services and records range from:

A. $2,000 to $5,000 a year _____
B. $5,000 to $6,000 a year _____
C. $8,000 to $34,000 a year _____
D. $12,000 to $50,000 a year _____

2. The three career fields of the Internal Revenue Services (IRS) are:

A. Federal Law Enforcement, Accounting, and Collection _____
B. Taxation, Border Patrol, Treasury _____
C. Internal Security, Intelligence, Public Safety _____
D. None of the above _____

3. Individuals can move up a career lattice in most Regulatory Service job families by:

A. Getting more formal education _____
B. Getting more work experience _____
C. Getting specific in-service training _____
D. All of the above _____

4. A career lattice for the license job family would be:

A. Supervisor, license interviewer, director, licenser _____
B. License interviewer, director, licenser, supervisor _____
C. License interviewer, licenser, supervisor, director _____
D. Licenser, license interviewer, supervisor, director _____

5. A career lattice for the Customs Service would be:

A. Customs Aide, Import Specialist, Customs Inspector, Supervisor _____
B. Customs Aide, Special Agent, Chief Investigator, Supervisor _____
C. Journeyman, Customs Agency, Analyst, Director _____
D. None of the above _____

6. A building inspector trainee would be an entry level worker in the:

A. Public records job family _____
B. Inspection job family _____
C. Examination job family _____
D. Licenser job family _____

Answer Key

1. c	3. d	5. a
2. a	4. c	6. b

Unit 1 Nature of the Field

1. **Transportation Services is:**
   A. A private moving company ____
   B. A major occupational group of the public-service career family ____
   C. Services which provide air transportation ____
   D. Services which provide ground tranportation ____

2. **Transportation Services are concerned with:**
   A. Reducing hazards and inefficiencies of congestion in both surface and air transportation ____
   B. Developing state and national policies to provide convenient and economical transportation ____
   C. Stimulating technological advances in transportation ____
   D. All of the above ____

3. **The need for transportation management services is perhaps most evident when one considers that:**
   A. Between 1973 and 1983 the total capacity of the transportation system must double to meet public needs ____
   B. Land use is at a premium in America ____
   C. Accidents take a costly toll, both in human loss and suffering, and economic loss ____
   D. All of the above ____

4. **Using more than one kind of transportation system (for example, rail and highway) is called:**
   A. Multiple transportation ____
   B. Intramodel transportation ____
   C. Intermodel transportation ____
   D. None of the above ____

5. **Surface transportation systems include all of the following except:**
   A. Highway systems ____
   B. Rail systems ____
   C. Airway systems ____
   D. Steamship systems ____

6. **Transportation systems have the capability to:**
   A. Move only people from place to place ____
   B. Move only things from place to place ____
   C. Move both people and things from place to place ____
   D. All of the above ____

7. **Which of the following is not a major challenge to transportation managers:**
   A. Air pollution _____
   B. Unsanitary conditions in food processing _____
   C. Noise pollution _____
   D. Transportation for the aged _____

Answer Key

1. b	5. c
2. d	6. d
3. d	7. b
4. c	

Unit 2 Management, Organization, and Role of Major Transportation Agencies

1. **The Department of Transportation:**
   A. Was organized in 1966 _____
   B. Was organized in 1967 _____
   C. Is planned to begin operations in 1984 _____
   D. None of the above _____

2. **The Federal Aviation Administration deals with all of the following except:**
   A. Preparing comprehensive city demonstration programs _____
   B. Air traffic control and security _____
   C. Landing facility construction and improvement _____
   D. Environmental protection and research _____

3. **Which of the following federal programs relates to the Federal Highway Administration (FHWA):**
   A. National System of Interstate and Defense Highways _____
   B. Bureau of Motor Carrier Safety _____
   C. National Highway Traffic Safety Administration _____
   D. All of the above _____

4. **Passenger and freight trains are now regulated by the:**
   A. New York Central Railroad _____
   B. Southern Pacific Railroad _____
   C. Federal Railroad Administration _____
   D. National Train Commission _____

5. **The Bureau of Railroad Safety, the Office of High Speed Ground Transportation, and the Federally owned Alaska Railroad are part of the:**
   A. International Railroad Association _____
   B. National Railway Commission _____
   C. Federal Railroad Administration _____
   D. None of the above _____

6. **Public transportation organizations are often given easements. An easement is a:**
   A. Right of way or lien on land _____
   B. Easy Access route _____
   C. Structural support column _____
   *D. All of the above _____

Answer Key

1. b	3. d	5. c
2. a	4. c	6. a

Unit 3 Functions and Duties of Workers

1. Which of the following statements is generally true?

A. Most transportation jobs are low paying _____
B. Many public-service jobs in transportation management are similar to transportation jobs in private industry _____
C. Very few public-service jobs in transportation management are similar to transportation jobs in private industry _____
D. Most transportation jobs are very high paying _____

2. The people who control airplanes in the areas around airports are known as:

A. Airport security police _____
B. Flight service specialists _____
C. Airport traffic controllers _____
D. Air-route traffic controllers _____

3. Most transportation management jobs are found at the:

A. State level _____
B. Federal level _____
C. County level _____
D. Municipal level _____

4. Which of the following job areas would not be included in the Highways Job Family?

A. Civil defense _____
B. Planning and design _____
C. Rate regulation _____
D. Driver regulation _____

5. Occupations closely connected with airports are:

A. Airport design and operation _____
B. Airport planning _____
C. Airport construction _____
D. All of the above _____

6. People responsible for guiding aircraft between airports are known as:

A. Inter-airport coordinators _____
B. Intra-airport coordinators _____
C. Airport traffic controllers _____
D. Air-route traffic controllers _____

7. **Public service personnel sometimes work with the railways as:**
   A. Operators of private railroad companies _____
   B. Operators and directors of rail passenger service _____
   C. Operators of most freight railroad services _____
   D. All of the above _____

Answer Key

1. b	5. d
2. c	6. d
3. b	7. b
4. a	

Unit 4 Qualifications, Career Lattices, and Employment Prospects

1. The largest public-service employer in air transportation is:
- A. Association of Air Traffic Controller ____
- B. National Aviation Association ____
- C. Federal Aviation Administration ____
- D. United Airlines ____

2. Air Route Traffic controllers should have:
- A. Psychological stability ____
- B. A good memory ____
- C. Ability to make quick, independent decisions ____
- D. All of the above ____

3. Right-of-way agents and accountants are employed by the:
- A. Federal Highway Administration ____
- B. Wells Fargo Company ____
- C. National Transportation Board ____
- D. None of the above ____

4. Due to the technical nature of many occupations in the transportation field, many entry level jobs require:
- A. A high school diploma ____
- B. An associate of arts degree ____
- C. A college degree ____
- D. A doctor's degree ____

5. Careers in transportation will:
- A. Level off and remain fairly stable ____
- B. Rise due largely to the expected increase in passenger and freight carrying loads ____
- C. Gradually decline as transportation systems become automated by computers ____
- D. None of the above ____

6. People in the auditor training program in a public-service transportation agency are usually:
- A. Accountants ____
- B. Examiners ____
- C. Transportation Aides ____
- D. Highway Engineers ____

Answer Key

1. c	3. a	5. b
2. d	4. c	6. a

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Project Staff

Patrick J. Weagraff, Ed.D . . . . . Director
Helen M. Nespor, Ph.D . . . . Curriculum Specialist
Harold M. Blue . . . . . Editor
Ronald W. Bertoli . . . . . Illustrator
Jeffrey Reyes . . . . . Curriculum Intern
Jean Smith . . . . . Typist
Miriam Dong . . . . . Typist

GPO 693-477/271

ACCESSION NUMBER: VT102223

PUBLICATION DATE: JUN75

TITLE: PREPARING FOR PUBLIC SERVICE OCCUPATIONS. COMMON CORE. CURRICULUM GUIDE.

DESCRIPTOR: *PUBLIC SERVICE OCCUPATIONS; *CAREER EDUCATION; *CURRICULUM GUIDES; *CORE COURSES; ENTRY WORKERS; COMMUNICATION SKILLS; GRADE 11; GRADE 12; ADULT EDUCATION

IDENTIFIER: CAREER PREPARATION

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 226P.; RELATED DOCUMENTS VT 102 220 THROUGH VT 102 226 IN THIS ISSUE.

ABSTRACT: THIS CURRICULUM GUIDE IS ONE OF A SERIES DEVELOPED AS PART OF THE PUBLIC SERVICE OCCUPATIONS CURRICULUM PROJECT TO ASSIST IN THE IMPLEMENTATION OF CAREER EDUCATION PROGRAMS CONCERNED WITH PUBLIC SERVICE OCCUPATIONS. THIS GUIDE CONSISTS OF NINE UNITS AND CONTAINS THE BASIC INSTRUCTIONAL MATERIAL RECOMMENDED FOR ALL AREAS OF PUBLIC SERVICE PREPARATION. IT OFFERS SUGGESTIONS FOR COURSE CONTENT, TEACHING MATERIALS, AND INSTRUCTIONAL OBJECTIVES, AS WELL AS TEACHER AND STUDENT ACTIVITIES HELPFUL IN PREPARING INDIVIDUALS FOR ENTRY-LEVEL POSITIONS IN PUBLIC SERVICE OCCUPATIONS. THE SUBJECT MATTER IS ORIENTED TOWARD TEACHERS WITH MINIMAL TRAINING AND/OR EXPERIENCE IN PUBLIC SERVICE EDUCATIONAL PREPARATION. UNIT TOPICS INCLUDE ORAL AND WRITTEN COMMUNICATIONS, BASIC REPORT WRITING AND RECORDKEEPING, GOOD GROOMING, RELATIONSHIPS WITH OTHER PEOPLE, INTERVIEWING SKILLS, APPLYING FOR PUBLIC SERVICE JOBS, AND TECHNIQUES OF DECISIONMAKING. APPENDED ARE A LIST OF RESOURCE SUPPLIERS AND SUGGESTED EVALUATION QUESTIONS FOR PRETESTS AND POSTTESTS. (AUTHOR/LJ)

CONTRACT NUMBER: OEG-0-71-4780(357)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402. (STOCK NUMBER 017-080-01433-5)

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. VOCATIONAL EDUCATION SECTION.

SPONSORING AGENCY NAME: BUREAU OF OCCUPATIONAL AND ADULT EDUCATION (DHEW/OE), WASHINGTON, D.C. DIV. OF RESEARCH AND DEMONSTRATION.

VT 102 223

Preparing for Public Service Occupations

VT 102 223

Preparing for Public Service Occupations

Common Core

by:

California State Department
of Education
Vocational Education Section
Program Planning Unit
Sacramento, California 95814

in accordance with:

U.S. Office of Education
Bureau of Occupational and
Adult Education
Division of Research and
Demonstration
Curriculum Development Branch
Grant No. OEG-0-71-4780 (357)

June, 1975

This document is one of a series of curriculum guides dealing with the Public Service Occupations career cluster. The titles of all individually available documents in this series appear below:

- Exploration of Public Service Occupations
- Orientation to Public Service Occupations
- Preparing for Public Service Occupations—Common Core
- Preparing for Public Service Occupations—Educational Services
- Preparing for Public Service Occupations—Law Enforcement Services
- Preparing for Public Service Occupations—Social Services
- Administering Public Service Occupations—An Implementation Guide

The project presented or reported herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

Developed pursuant to grant No. OEG-0-71-4780
by the California State Department of Education
Vocational-Technical Education Curriculum Laboratory
Sacramento, California
Funded by the U.S. Office of Education under
Part I - Curriculum Development in Vocational and Technical Education
Vocational Education Amendments of 1968,
Public Law 90-576
1975

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FOREWORD

This *Common Core Career Education Curriculum Guide* is one of a series developed to assist those involved in implementing career education programs concerned with public service occupations. This Guide consists of nine units and contains the basic instructional material recommended for all areas of public service preparation. It offers suggestions for course content, teaching materials, and instructional objectives, as well as teacher and student activities helpful in preparing individuals for entry-level positions in public service occupations. The subject matter is oriented toward teachers with minimal training and/or experience in public service educational preparation. Units are presented in a sequential order; however, each is designed to stand alone as a separate body of knowledge.

Primary emphasis is on public service occupations preparation; however, other individuals may also want to utilize the information contained in this Guide.

All of the information is "suggested," and should be adapted to meet local conditions and needs.

A wide range of suggestions and approaches to the subject were received and, wherever possible, incorporated into the final document. Since the resulting materials represent many opinions, no approval or endorsement of any institution, organization, agency, or person should be inferred.

This Guide was prepared by the California State Department of Education, Vocational Education Section, Program Planning Unit, which is under the direction of E. David Graf. The major responsibility for the coordination of this guide belongs to James J. Lynn, Curriculum Specialist, Public Service Occupations Curriculum Project.

Patrick J. Weagraff, Ed.D.
Project Director

ACKNOWLEDGEMENTS

The completion of this career education guide depended upon the assistance, advice, and cooperation of many individuals. The California State Department of Education, Vocational Education Section, Program Planning Unit, wishes to acknowledge in particular the contribution of the following individuals:

Lillian K. Avery
Special Consultant
Los Angeles, California

Victor A. Backstrom
Public Service Occupations Teacher
Long Beach, California

John Bunten, Senior Program Officer
Bureau of Adult and Vocational-Technical Education
San Francisco, California

Dr. William E. Burns
Professor of Education
State University College at Buffalo
Buffalo, New York

Dr. Clark Dobson, Associate Secretary
Association for Supervision and Curriculum Development/NEA
Washington, D.C.

Dr. Ronald Detrick
Director of Career Education
San Diego Unified School District
San Diego, California

Dr. Nevin Frantz
Assistant Professor of Education
University of Georgia
Athens, Georgia

Alfred W. Koch
Curriculum Coordinator
Rawlins Public Schools
Rawlins, Wyoming

Andrew S. Korim
Public Service Specialist
American Association of Junior Colleges
Washington, D.C.

Fred Martinez, Consultant
Education for the Disadvantaged
California State Department of Education
Sacramento, California

James B. Mayo, Coordinator
Fremont-Newark Regional Occupational Program
Fremont, California

James J. McIlwrath, Consultant
Office of Program Evaluation
State Department of Education
Sacramento, California

Fred Miller, Chief
Public Service Institute
Department of Education
Harrisburg, Pennsylvania

Paul N. Peters, Manager
Career Education Task Force
State Department of Education
Sacramento, California

Dr. Marvin J. Rosen
Associate Professor
California State University
Fullerton, California

Dr. William G. Thomas, Dean
Educational Career Services
Office of Educational Career Services
University of California
Los Angeles, California

Mrs. Melba Williams
Georgia Municipal Association
Atlanta, Georgia

Dr. James Wykle
Education Program Specialist
U.S. Office of Education
Washington, D.C.

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Unit 1

ORAL COMMUNICATIONS

Here are the contents of the introductory unit to the Common Core group. We suggest a careful reading of it before you read the text.

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Unit 1

ORAL COMMUNICATIONS

INSTRUCTIONAL OBJECTIVES

1. Ability to speak fluently, with correct articulation and pronunciation.
2. Ability to group words into meaningful phrases.
3. Ability to stress words and phrases to enhance communication.
4. Ability to control voice volume and tone according to needs.
5. Ability to use speech forms appropriate for the audience.
6. Ability to use body control and visual aids to enhance communication.
7. Ability to participate effectively in informal conversation and group discussion.
8. Ability to speak effectively and confidently before a group.
9. Ability to persuade or convince listeners.
10. Ability to value the importance of oral communication as an essential skill for working in public service occupations.

CONTENT

INTRODUCTION

Oral communication is one of the more basic processes underlying human relationships. The use of speech to transmit ideas, to

probe the ideas of others, to teach, to persuade, to entertain, to motivate, and to otherwise influence and affect others is a uniquely human activity. Speech is used in the most casual and informal of human interactions, as well as in formal settings involving many persons. Through the mass media, the sounds and forms of speech may reach millions of persons simultaneously. Thus the ability to speak effectively in a variety of settings is an essential skill in all activities in which human beings interact with one another.

A basis is provided herein for the development of the student's ability to communicate effectively through speech for a variety of purposes and in a variety of settings, particularly those common to public-service occupational settings. Whatever the particular purpose or setting, however, effective speech will require the speaker to have a clear idea of his purpose and his audience, to organize his thoughts and information in an orderly way, to express himself effectively through his delivery and his knowledge of human relations, to report relevant facts, to explain and summarize clearly, and to evaluate the effectiveness of his communication.

This unit provides a framework for organizing instruction in basic speech skills, while providing practice in speaking for several purposes in several settings.

GENERAL PRINCIPLES

Whatever the particular purpose or setting for oral communication, the speaker can add to his effectiveness by applying certain general principles. In general, these principles can be considered under two broad categories:

- principles affecting delivery, and
- principles affecting human relations.

These two categories are perhaps the most important aspects of oral communication. The principles of delivery and human relations must be applied in a variety of speaking situations.

PRINCIPLES AFFECTING DELIVERY

The delivery of oral communications may be considered under two general categories of:

- *physical delivery*, which includes voice control, articulation, pronunciation, body control, and visual aids, and
- *verbal delivery*, including choice of words and style of delivery.

Physical Delivery

Voice Control. The effectiveness of oral communication depends in large measure upon the physical delivery of speech symbols, one major aspect which is voice control. Voice control has several distinguishing characteristics: pitch, volume, duration, and quality:

- *Pitch* is the characteristic of sound as it relates to the musical scale. Each person's voice has a certain pitch level that may be considered as high, low, or medium. Certain conditions of pitch can cause communication to suffer:

  when the voice is pitched too high,
  when it is pitched too low, and
  when it lacks variety of pitch and is monotonous.

- *Volume*, or loudness, is another characteristic of voice. Speakers may be troubled when the voice volume is

  too great,
  too weak, or
  lacking variety, or monotonous.

- *Duration* refers to the length of time a sound lasts, particularly the vowel sounds. There are two chief problems related to this control:

  overlengthening of vowels, resulting in a drawl,
  eliminating or clipping of vowels, resulting in erratic and staccato speech patterns.

- *Quality of voice* refers to that characteristic which distinguishes one person's voice from another's, the voice's "fingerprint," so to speak. The student should strive to achieve a pleasing and harmonious quality. Common quality faults include

  nasality - (too much nasal resonance),
  denasality - (too little nasal resonance),
  harshness - hoarseness, and breathiness.

Articulation. To make himself understood, the speaker must produce speech in such a way that the audience is able to recognize the individual words he speaks. This is dependent upon the elements of:

- *articulation*, or the joining together of consonants and vowels that go to make up the word, and

- *pronunciation*, or the fitting together of these sounds according to commonly accepted standards.

These concepts are often confused. *Articulation has to do with the clarity or distinctness of utterance*, while *pronunciation has to do with regional or dictionary standards*. It may be said, "We mispronounce words when we don't know how to pronounce them; we misarticulate words when we know how to pronounce them but fail to do so." Through habit, carelessness, and indifference, individuals may acquire such articulation problems as:

- *substitution of one sound for another*, in such words as:

  "dat" for that,
  "git" for get,
  "liddle" for little,
  "winduh" for window,
  "yur" for your.

- *insertion of extra sounds*, as:

  ath-uh-lete for athlete,
  acrosst for across,
  ekscape for escape,
  fil-um for film.

- *omission of certain sounds*, such as:

  at for that,
  em for them,
  pitcher for picture,
  probly for probably,
  slep for slept.

- *misplacement of accent*, for example:

  com-PAIR-a-ble for COM-par-a-ble,
  pre-FER-a-ble for PREF-er-a-ble,
  the-A-ter for THE-a-ter.

<u>*Pronunciation*</u>. A person may be able to form all the speech sounds in a word accurately without saying the word correctly. The letters of words do not always represent the same sounds. When the person can form the sounds of a word correctly but does not know the acceptable way to form them, he has a pronunciation problem. The way to achieve acceptable pronunciation is to check new words in the dictionary and to be sensitive to the pronunciations heard in the speech of others. If others pronounce a word differently, the word should be looked up at the very next opportunity before using it again. The teacher must play a central role in identifying words misarticulated and mispronounced by students.

Body Language as Communication. In addition to voice and articulation-pronunciation controls, a speaker's whole body acts as an important tool in the physical delivery of speech. Through the judicious use of eye contact, facial expression, and body activity the speaker can supplement and reinforce his spoken communication by means of visual symbols.

Eye Contact. It is important for effective oral communication that the listeners feel that the speaker is speaking directly to them. No matter if the speaker is addressing one person or many, each listener should gain a feeling that the speaker is addressing him. Thus, *eye contact* between the speaker and his audience is essential in virtually every speaking situation. No matter what the setting, therefore, the speaker should make every attempt to meet the eyes of all members of the audience to achieve a feeling of directness and all-inclusiveness. The eyes of the speaker should meet those of members of the audience, not look past them or avoid them, nor over their heads, out of the window, down at the floor, or up at the ceiling. Eye contact with members of the audience will also help the speaker watch for audience reactions, for signs of misunderstanding, doubt, or question which may help him modify his communication in response to audience reactions.

Facial Expression. Another form of body control is the use of *facial expression* to clarify and enliven oral communication. The speaker's face, used effectively, can reflect his interest in his own message, the intensity of his feelings, his sincerity and purposefulness. Hiding behind a mask of blankness and composure can deny the speaker an important tool in the communication of his ideas. To develop this facility with facial expression, the learner should try always to communicate ideas in which he has a high interest and in which he has a sense of competence and concern. It is difficult to generate facial liveliness when speaking on a topic of little personal concern.

Body Activity. The use of gestures and general *body activity* provides another means for supplementing speech. The use of motor activity involving the head, torso, arms, hands, or gross body movement to emphasize the spoken word is a skill which may be cultivated. A shrug of the shoulders, a nod of the head, a straightening of the torso, a lift of the chin, or a step toward the audience can indicate indifference, emphasis, firmness of purpose, a questioning attitude, or determination.

Body activity can, however, be overdone to the point where too much activity may distract from the message. The use of body activity must be judicious if it is to have a controlled and desired effect on the listeners.

Another fault in this area involves the unconscious use of distracting mannerisms which may result from habit, nervousness,

or preoccupation. Such mannerisms usually are unrelated to the content of the message, such as shifting weight from foot to foot, finger or foot tapping, nose or head fiddling, generalized arm waving, lint picking, and the like. The student should learn to normally use body movement only for specific purposes, while trying to eliminate all mannerisms and overuses which distract from the message.

Visual Aids Help Oral Communication. The physical delivery of speech may be enhanced also through the use of visual aids. Visual aids may be useful for several purposes:

- *for getting attention and interest*. Well-chosen and relevant aids command attention through their shape, color, texture, or movement. A speaker can capture attention by using materials which appeal directly to the senses.

- *for clarifying*. When words are insufficient to communicate an idea, a visual aid may help make an idea clearer. A sketch or drawing, a photograph or model, often can clarify in an instant what may be impossible to describe verbally.

- *for impressing on memory*. Aside from getting attention and clarifying an idea, the speaker may wish to affect the listener's memory. A well-chosen visual aid may help etch an idea on the memory far more effectively than a well-turned phrase.

- *for increasing poise*. The use of visual aids may provide a framework for the speaker's activity, giving him something to do which may serve to increase confidence. The use of visual aids as a "crutch" should not be encouraged in the long run; however, their use in this way may serve to aid the self-confidence of the learner in the initial stages of speech training.

Many types of visual aids may be found useful to supplement oral communications. These include charts, graphs, maps, globes, chalkboard sketches, flip charts, models, moving pictures, projected slides and illustrations, photographs, or television enlargements. In using visual aids, the speaker should follow several basic guidelines:

- He should use the visual material purposefully.
- He should be certain that the entire audience can see the aid.
- He should maintain eye contact while using the aid.
- He should avoid dividing attention with the aid when it is not in use.

Verbal Delivery

The effectiveness of oral communication depends also upon the speaker's choice of language and his style of delivery. The words he uses, the phrasing by which he assembles them, and the manner in which he delivers them, are the elements of *verbal delivery*.

Choice of Language. Good language in oral communication is language adapted to the audience and to the occasion. In choosing language, the speaker must consider himself, the ideas he wants to express, the characteristics of the audience, and the nature of the setting. Thus he must ask himself, "Is this expression suitable for me to use in communicating this thought to this audience on this occasion?"

Use clear language. To accomplish this, the speaker should use language which clarifies his thoughts. Language should be simple and not pompous. Unnecessarily complex expressions or technical terms should be avoided. Too many words, too ornate words, too pretentious words, can hamper communication. The criteria of clarity in speaking are directness, economy, and aptness. For example,

Instead of	Say
prevarication	lie
domicile	home
this moment is one of great joy to my heart	I'm glad to be here

Seek precise words. It is also a good idea to use precise language. Words and expressions which are specific to the intended meaning are more likely to communicate that meaning than more general and abstract words. In this vein,

Instead of	Try
car	hardtop, sedan, Ford, or 1973, hatch-back Pinto
said	replied, stated, cried, commented, uttered

Avoid imprecise wording. Avoid roundabout expressions, or *euphemisms*, which create special problems in lack of precision. "Soft-pedaling" an idea now and then may be justified if the speaker does not sacrifice his overall credibility. But care must be taken that the use of euphemisms does not act to call into question the speaker's ideas or intent. Therefore,

Instead of	Try
he passed to his just rewa[illegible]	he died
he received his termination notice	he was fired
the effects were not inconsiderable	the effects were great

Use appealing language. The speaker should also seek to use language which will enliven his thoughts. One way to achieve this is to use language that appeals to the senses. Thus language that appeals to movement, color, light, texture, form, taste, smell, sound, and the like will tend to put life in the speaking. Thus,

Instead of	Try
a difficult peace	a hard and bitter peace
an old ship	a splintery, creaking old ship

Animate abstract ideas. Figurative language, too, can enliven speech by animating an abstract idea. The use of simile, metaphor, personification, and irony (look up the meanings in your dictionary) are especially useful. For example,

Instead of	Try
her arrival silenced everyone	her arrival was like a chill winter wind
he paced to and fro	he was like a caged lion
the winds rustled the trees	the trees whispered in the winds
we worked a lot of overtime	oh, we twiddled away our time and often left early!

Use varied techniques. The speaker should develop ways to vary his choice of language. Variety in expression can help to sustain interest and attention, while often clarifying meaning. Students should practice changing their language by use of techniques such as:

- varying the shaping of sentences (use of questions, use of imperatives, varying order of phrases, etc.).
- building climax within passages.
- using parallelisms (recurring similarities of phrase or word arrangements).
- using alliteration (repeating first syllables, or consonants in consecutive words).

- using repetition of phraseology.
- using fresh language; i.e., avoiding the ordinary and the hackneyed, or shopworn, cliche-type phrases.

Use appropriate language. The speaker should always take special pains to use language appropriate to the occasion, and language which is standard. The speaker can be too formal or too informal, either of which will reduce, for particular occasions, the effectiveness of his communication. While the formality of language may be adjusted to the occasion, rarely will it be appropriate to use common slang or the language of the streets in any formal communication setting. Similarly, the use of standard speech will usually be appropriate and aid in communicating ideas, whereas the use of substandard language forms may inhibit understanding and reduce the speaker's credibility among many segments of his audience.

Use natural language. Further, *it is important on all occasions that the speaker use language that is his own, language which is familiar and comfortable.* Each student should work toward developing broader vocabulary and a greater variety of language skills, but should be discouraged from trying to achieve these in large steps. Language skills are developed over long periods of time, and at any given stage of development the student should use the language with which he is most comfortable and natural. In this way each student, over time, may develop uniqueness and effectiveness of style - that characteristic of one's speech which brands it distinctly as his own.

Develop a Good Style of Delivery. Finally, *control of delivery rate, rhythym,* and *phrasing* will be essential to achieving clarity and effectiveness in oral communication. *Rate* may be controlled by the number and duration of the silent spaces between words and phrases, as well as by the time taken in the production of individual sounds, particularly the vowel sounds. Faster rates may be called for at times; at other times, slower rates. Variations in rate can affect the clarity of communication as well as the mood. A slow and ponderous rate may create a mood of solemnity; a rapid rate, one of lightness and joyfulness. One should vary his rate within speech to achieve variety as he varies other aspects of verbal delivery.

These variations, together with the individual's use of pauses and techniques of sound production act to generate a *rhythm of speech* which is part of the individual's style. Care should be taken that the use of pauses aids rather than hinders meaning - that pauses occur in appropriate places.

Also, especial care should be taken that irrelevant sounds, such as "ah," "uh," and "um" do not creep into the individual's

speech to fill up the spaces and to break up the flow of ideas. The rate and rhythm of speaking should compare favorably to a musical composition in which the breaks, accelerations, slowdowns, and repetitions add interest and clarity to the composer's purpose.

PRINCIPLES AFFECTING HUMAN RELATIONS

In addition to those principles of oral communication which affect delivery, a number of principles of oral communication affect the relationship between the speaker and his audience. It should be self-evident that a listener will be more receptive to a speaker's ideas if a positive relationship exists between them. The speaker can apply certain principles which will tend to create and to maintain this type of positive relationship.

Respect the Dignity of Others

Every human being desires self-respect, a sense of personal worth, and dignity. In dealing with others it is basic to honestly nourish this desire. If we do or say anything which will injure another's dignity, if we humiliate or demean him in any way, we create resentment and antagonism which can obstruct effective communication. To implement this principle, try the following techniques in both formal and informal communications:

- *Make the other person right in something*. Even though you may disagree with him, start your search for agreement by pinpointing something in which he is right and go on from there.

- *Avoid complaining or finding fault*. The complainer and the fault-finder destroy all reasonable relations with others. Follow the maxim, "Fix the error, not the blame." Protect the dignity of others by showing your respect for them personally, even while you may disagree with their ideas or criticize their work.

- *Avoid arguments*. Arguing with another implies that he is ignorant or mistaken and thereby diminishes his dignity. Antagonism can easily form around argument and obstruct effective communication. By being modest in advancing ideas and by avoiding telling others they are wrong, a speaker can reduce the possibility of damaging arguments. Rather than saying, "It is obvious that....," or "Any right-thinking person can see that....," try saying, "It appears to me that....," or "Let us consider the possibility that...."

- *Admit personal mistakes.* If one is willing to admit that he is human enough to make an error, others find their own self-image taking on increased stature.

Develop An Honest Interest in Other People

This second principle challenges us to develop an attitude of curiosity about others and to pursue this curiosity rather than to tell others about ourselves. Rather than a "Here I am" attitude, develop a "There you are" attitude. Such an attitude creates respect in others, and enables one to know those with whom he deals, to understand them, and to treat them as individuals. To cultivate an attitude of interest in others, try the following techniques:

- *Be an interested listener.* One cannot possibly respect another's point of view unless he hears it out.
- *Smile honestly and often.* A person need not agree with, approve of, or like another's point of view; understanding, recognition, and interest are sufficient to stimulate an honest smile which will reflect one's appreciation and respect for the other's point of view.
- *Ask questions frequently to understand others.* Questions are valuable because they require people to take specific actions in the direction of others. A good question reveals that one has really been listening and further, that he has an interest in what was said. And it gives another an opportunity to further reveal himself, thus providing a mechanism for getting better acquainted.

Recognize Individual Uniqueness and Worth

This third principle asks us to see people as individuals, to respond positively to their better qualities, and to understand their weaknesses. To develop ability in this area, try such methods as:

- *Get names right and use them often.* Every person has a name which designates his uniqueness. One's use of it reveals recognition of his uniqueness. Using names correctly and frequently not only satisfies the natural desire of another for recognition, but aids a person to identify another as an individual.
- *Be appreciative and quick to give approval.* Being ready and generous with appreciation builds good human relations in two ways. It nourishes the receiver's feeling of self-esteem and worth. And it trains the giver to be observant of the strong or desirable traits and behavior of others.

- *Assume that people will behave in a good manner.* If we ascribe the best of motives and intentions to others, they will be inclined to live up to them. Assume the best of every person and you will rarely be disappointed. Assuming the best of them gives implied recognition to their worth as individuals.

- *Respect the rights and opinions of others.* A person need not always agree with the opinions of others, but he must respect the right of others to hold opinions different from his own and refrain from belittling or contradicting them. The opinions of others are very much a part of their psychological and intellectual makeup, and to refuse respect for an opinion is to deny respect to the person himself. *Effective communication cannot occur between persons without mutual respect for their rights and opinions.*

Cooperate With the Wants of Others

This fourth principle emphasizes that behavior is directed from within a person as he attempts to satisfy his own wants or to solve his own problems. If a person seeks to communicate with others and to direct their behavior in a particular direction, he must cooperate with the wants which motivate them. That is, he must align his purposes with their wants and avoid the appearance of denying or frustrating those wants. Nevertheless, there is a difference between cooperating with the wants of others and giving in to them. Cooperation simply implies that one should present his case in a way which will reveal how the listener will benefit. Some techniques for implementing this principle follow:

- *Encourage initiative.* Great energy can be released by encouraging and tactfully guiding the initiative of others. Challenging the creative imagination of others - in proposing solutions to problems, in developing plans, in organizing for action, and the like - reveals the speaker's respect for the ideas of others, and can go a long way to assure their cooperation and participation in the final activity. When one's own initiative and imagination has been challenged, he is more likely to align himself with the decisions which are finally reached.

- *Help the other person get what he wants.* When another sees a person willing to help him satisfy his wants, an atmosphere conducive to effective communication and cooperation has been established. Try to recognize what others want and address the issues from their point of view.

- *Present problems and ask for solutions.* When one must ask another for help, when he must assign work, or when he wants to enlist cooperation, then he will often find it more productive to present the problem and ask for help in its

solution than to make a direct demand. Instead of saying, "George, move those boxes out of the aisle," try saying, "George, these boxes are dangerous where they are; someone may injure himself. Is there some other handy place for them where they will be out of the way?" By involving George in solving the problem you show respect for his ideas, and he will more likely WANT to help solve the problem.

- *Present doubts, opinions, or objections in question form.* Sometimes we must necessarily disagree with another. When it is necessary, we can make our disagreement more objective and more acceptable to others if we avoid over positive or challenging statements. One technique for achieving this is to voice our concerns in the form of questions, which may minimize the possibility of arousing resentment or starting an argument.

  By asking questions, one establishes the basis that the other fellow may, after all, be right and thereby shows respect for his ideas. Instead of saying, "George, I don't agree with you that the service counter should be placed just inside the entry door," one should try asking, "George, if we did put the service counter just inside the entry door, wouldn't it cause waiting customers to block the entrance?" In this form the objection does not challenge George's ideas, nor put him on the defensive, since George is being asked to contribute his further ideas on the matter.

  If people can adopt the method of offering opinions, doubts, and objections in the form of questions, then a cooperative attitude can be encouraged in others instead of a hostile one.

One who cultivates skill in the systematic application of the foregoing principles of human relations in his oral communications will find his listeners more receptive to his ideas.

PERSON-TO-PERSON COMMUNICATIONS

Not only in the public-service occupations, but in business, industry, and everyday life, the form of communication most often used is *person-to-person speaking*. Any human activity which requires the interaction of two or more persons will rely heavily upon person-to-person speaking to establish and maintain social relationships, to plan, to coordinate, and to carry out cooperative tasks. *Effectiveness in person-to-person communication is essential for effectiveness in most jobs.* The forms of person-to-person communications most commonly used in public-service occupations and discussed herein are informal conversation, interviewing, and group discussions.

Informal Conversation. The major difference between conversation and public speaking is that in conversation there is give-and-take, while in public speaking the speaker does all the talking. Yet even this difference may be more apparent than actual, for in real life conversants may hold the floor for long periods of time, and public speakers may be seeking two-way communication with their audiences.

There are few firm rules of conversation which will hold true in all situations because conversational situations may vary so widely. Not only do topics vary, but the makeup of the conversants in age, occupation, interest, education may also vary. So may the time, place, and purpose of the gathering. So many situations are possible that the conversationalist who tries to meet them all in the same manner is doomed to failure. *The good conversationalist will try to develop a wise adaptability.* Some guidelines which may prove helpful are these:

- Pursue only those subjects of interest to all the conversants.
- Avoid saying about another what you might resent being said about yourself.
- Avoid statements which you would be embarrassed to have repeated with your name cited as the source.
- Maintain a conversational tone: good-humored, alert, and vigorous, without being rancorous.
- Express opinions, but avoid being opinionated; contend without being contentious.
- In general, adhere to the principles of good human relations discussed in the previous section.

Interviewing. Most persons, at one time or another, have been interviewed. Public-service employees, at one time or another, may be expected to conduct interviews. While interviews have many characteristics in common with conversation, there are important differences. An interview is a planned conversation - it is arranged in advance by the parties and is intended to accomplish some purpose. Interviews may be *structured* (directive) or *unstructured* (nondirective) in form. The former is likely to be task- or subject-centered and is most common in work situations. The latter are likely to be person-centered and are used for counseling, analysis, and therapy. Thus, they usually require that the interviewer have substantial professional training. There are many kinds of, and purposes for, interviews. For example:

- *Employment interviews:* for securing, developing, and training employees.

- *Induction interviews:* for orienting new employees.
- *Performance review interviews:* for training, and developing employees.
- *Counseling interviews:* for personal and personnel matters.
- *Correction interviews:* for disciplining and guidance of staff.
- *Grievance interviews:* reverse correction interviews.
- *Data gathering interviews:* to obtain special information.
- *Consulting interviews:* exchange of information and problem solving with an expert.
- *Sales interviews:* for persuading another.
- *Order-giving interviews:* to assign tasks and procedures.
- *Exit interviews:* a debriefing of an employee upon separation.

From the above it can be seen that interviews are directed toward serving three basic goals:

- to increase understanding through information-giving and information-getting,
- to persuade, and
- to solve problems.

To be effective, interviews should be carefully planned. Objectives should be determined in advance, and thought should be given to major obstacles likely to arise. The strategy and tactics of the interview should be planned beforehand, and consideration should be given to some contingency plans in the event that certain events occur during the interview.

The beginning of the interview should establish a workable arrangement between the parties by establishing an appropriate atmosphere, stimulating interest and attention, and presenting the problem or goal of the interview.

The body of the interview should pursue the above objectives.

The close of the interview should round out and gracefully terminate the interview. The gist of the interview should be reviewed or summarized; the bases for further conversations should be established if necessary; and appreciations should be expressed.

Group Discussions. The term group discussion describes an activity that enables a number of cooperative people to talk freely about a problem under the leadership of a member of the

group. They have the common purpose of interchanging ideas for specific needs. Group discussion is sometimes confused with debate, but the two activities differ in purpose, in format, and in the attitude of the participants. *The purpose of debate is advocacy; the purpose of discussion is inquiry.*

In group discussion, the participants deliberate seriously with minimum restraints. They work in cooperation with one another in discussion at least until the group as a unit has reached a solution to a problem. Their purpose is to inquire in order to learn all aspects of a problem, and then to solve it. Although participants may disagree, their purpose is to sort out the areas of agreement in arriving at answers.

Techniques of Group Discussion. The techniques and formats of group discussion may vary, but the underlying purpose remains the same - to inquire into the essential aspects of a problem and to solve it. Some types of discussions, such as the *meeting*, or *round-table*, are not intended for audiences; others, such as the *panel*, the *symposium*, and the *forum*, are planned for audiences. Whatever the format, the participants should remember that they are acting as a group studying a question. It requires real skill on the part of all participants to pool relevant information, to move the discussion forward, to limit heated cross-talk, and to stress areas of agreements.

Criteria for group discussion. Group discussion is useful only if the group has a real problem to solve and if its members all agree on what that problem is. Thus, stating the question in an effective way is important to promote fruitful discussion. Here are some criteria for worthwhile discussions:

- The problem should deserve a solution.
- The problem should be worth the time spent on it.
- The problem should be either timely or timeless.
- The problem should be able to be solved in the time available.
- The group should be competent to solve the problem.
- The problem should be stated in question form.
- The question for discussion should not be stated in a form demanding a "yes" or "no" answer, but in a form indicating a need for discussion. (Instead of: "Should the federal government control the press?" try: "What should be the role of the federal government in regulating the press?"

Leading a discussion requires some special skills. The discussion leader must insure the orderly, systematic, and cooperative consideration of the question. He tries to direct the course of the discussion without manipulating the group to

accept any particular conclusion. He assures that every member of the group has an opportunity to participate, and that no one monopolizes the floor. He provides needed facts or calls upon others to provide them. He summarizes when needed and restates the issues under discussion. He strives to keep the emphasis upon agreement and cooperative thinking in order to avoid conflict.

A simple functional plan for discussion leadership might include the following steps for a problem-solving discussion:

- Introduction of the problem by the leader.
- Defining potentially confusing terms.
- Presentation of relevant facts by group members.
- Specifying criteria for judging a good solution.
- Presentation by members of possible solutions.
- Analysis of solutions in relation to criteria.
- Decision: which solution is preferred, or what additional information is needed before a decision can be made.

Forms of group discussion. Several forms of group discussion are in common use. Each occasion for group discussion implies its own format for discussion which will best serve its own specific needs, purposes, and interests.

The common formats include:

- The *round table* (or informal) group discussion is usually not observed by an audience. The preferred number of participants is from four to seven, although good discussions may be held with as many as fifteen or as few as three participants. The discussants should cooperate courteously in reaching a decision. Formal recognition to speak is not necessary. The outstanding characteristic of the round-table discussion is its informality.
- The *panel* is similar except for the presence of an audience. With an audience, the members are more formal in their presentations, speaking not only for themselves, but for the audience as well. If the audience participates by asking questions after the solution has been reached, the activity is called a *panel forum*.
- A *symposium* differs from the panel or round-table because all participants, perhaps three or four, are experts on phases of the question. The speakers give set speeches in order and are provided little opportunity for interchanging ideas with their fellow participants. The symposium is typically presented for the benefit of an audience. Often a panel follows a symposium, offering the participants an

opportunity, after their individual presentations, to exchange ideas in a discussion format. When the audience is invited to ask questions of the participants, the activity is called a *symposium-forum*.

- The *forum* is an activity distinguished by audience participation. The forum may be used in combination with a panel, a symposium, a lecture, a debate, or any other form which may be useful to communicate basic information to the audience prior to its participation. The leader, in conducting a forum, should explain the procedures to be followed by members of the audience in asking questions or making comments, including how to be recognized, how much time will be allowed, and the like.

Group discussion is an excellent means of pooling knowledge, reaching decisions, and informing the public. The public-service employee will find himself participating in group discussion both within his organization, at staff meetings and other groups, and for audiences as a means of informing public opinion.

SPEAKING BEFORE GROUPS

The distinction between speaking IN a group and speaking BEFORE a group is not always apparent. If, as a member of a group, one speaks his piece for five full minutes without interruption, or if he rises and speaks from a standing position, is he speaking in the group or before it? While it is a popular notion that group speaking, or public speaking is characterized by a much higher degree of formality, and by one-way communication from the speaker to his audience, it is well to consider speaking before a group as simply dignified, amplified conversation. *Public speaking, at its best, seeks to establish a carefully planned conversational relationship with a group of persons.*

The public-service employee will find many occasions in which he will be called upon to speak before a group. The group may be his co-workers, as at a staff or committee meeting; his colleagues, as at a professional conference; or members of the public, as at a public meeting, or a meeting of a citizens' group. Whatever the particular occasion, the employee may be called upon to speak before a group for any of several purposes. The general principles of effective oral communication apply to public or group speaking, as well as to person-to-person speaking, and attention to these principles will aid in developing effectiveness in speaking before groups. Public-service employees commonly participate in speaking before groups for the purposes of informing, instructing, persuading, motivating, or entertaining.

Speaking to Inform

The primary purpose of the speech to inform is to convey information to listeners to clarify a point of view, a process, a method, an idea, a problem, or a proposed solution. By far the greater amount of speaking before a group is done to convey information. The content may vary from relatively simple, concrete topics, such as how to complete a personnel form, to highly abstract topics, such as how a client-centered program will affect relations with clients.

Three general types of informing speeches are commonly used in public-service work:

- reports,
- briefings,
- informational talks.

An *oral report* summarizes in orderly fashion a body of information, usually assembled by the person making the report.

A *briefing* is similar to a report, except that it usually occurs as a prelude to some imminent action. All the facts needed for decision-making actions are assembled immediately before the action, and conveyed to those who will be making the decisions.

The *informational talk* is less formal, usually delivered by a knowledgeable person without need for much formal preparation. An informational talk might be presented by the head of an agency about the agency's work to a group of new employees. A simple and typical four-part outline for information speeches consists of the following parts:

- *Introduction:* Tell them what you are going to tell them.
- *Key Idea:* Tell them the main or central idea.
- *Body:* Tell them the details.
- *Conclusion:* Tell them what you told them.

Speaking to Instruct

Almost every employee in a public agency at one time or another will be expected to teach or train others. This teaching will often occur in a group situation, and the employee will function as a teacher, speaking to the group, assigning practice, evaluating student work, and similar activities. Speaking for this purpose should generally follow the rules of good human relations, of course, but additionally should use certain principles of learning which will increase the effectiveness of teaching.

When speaking to instruct or train a group, the instructor should employ the following principles:

- *Include an advance organizer:* A summary of the tasks which will be learned, and a reason for learning them.
- *Provide active practice:* Give the learners, or listeners, plenty of opportunity to practice what you want them to learn. Ask a lot of questions; hand out worksheets; break the group into "buzz" groups for discussion; get them actively involved.
- *Help them succeed:* Don't assign them work or ask them questions which they are likely to fail. Give them hints if necessary during practice, but help them succeed.
- *Give them plenty of feedback:* If they answer a question correctly, or turn in a correct worksheet, or make a correct contribution in some other way, let them know it right away. Not tomorrow, or next week, but let them know immediately.

If these principles can be incorporated into instructional talks and training sessions, they are likely to be more effective.

Speaking to Persuade

The public-service employee may find himself speaking to persuade a group from time to time. In ordinary work situations, he may wish to persuade his fellow workers to adopt a new policy, or a certain attitude toward their work. On other occasions, he may be speaking to members of the public, trying to persuade them favorably toward his agency, or to avail themselves of the agency's program.

Basically, there are three types of appeals which the speaker can make to his audience:

- *Logical appeals:* Through the use of deductive reasoning (from general ideas to specific conclusion) and inductive reasoning (from specific data to a general conclusion), and the presenting of factual evidence to support this reasoning, the speaker appeals mainly to the listener's intellect and reason.
- *Psychological appeals:* Through appeals to the listener's motivations, feelings, and values, the speaker tries to get his listeners to WANT to adopt the idea being presented.
- *Personal appeals:* Through his own personal effect, the speaker tries to influence his listeners - by characterizing his own reputation, appearance, personality, and character in a way which will create a favorable and receptive climate for his ideas.

Beyond these types of appeals, the persuasive speaker will do well to attend carefully to the principles of good human relations discussed earlier.

Speaking to Motivate

Another occasion for speaking before a group is to motivate them - to excite, arouse, or spur them on. Usually such speaking is occasioned by some strong feelings in the speaker about his subject. He may, for example, feel that the staff of the agency is simply not attaching sufficient importance to certain areas of their work. At a staff meeting he might address the group and try to get them "fired up" about that work.

Speaking of this type generally follows the patterns of the persuasive speech, since we often are seeking to influence the listeners in a particular direction. Typically, however, its appeal tends to focus upon the psychological, since the speaker is usually more interested in affecting attitudes, motivations, and values than he is in affecting beliefs.

Speaking to Entertain

While not normally central to the duties of public-service employees, the entertaining speech is an occasional responsibility which may fall to almost anyone. At an annual dinner, a staff party, an agency picnic, one may be called upon to speak briefly to a group in a light and casual tone. When called upon on such an occasion, one should be especially aware that he need not be uproariously funny to be entertaining. *To entertain means simply to amuse or to divert.*

It is well to recognize that few persons have the practiced skills of a professional comedian to keep an audience laughing from start to finish. The occasional speaker who seeks to entertain an audience, to amuse and divert them for a few brief moments, does well to adapt his humor to the local and familiar experiences of his audience.

In general, the entertaining speech should attend to the principles of good human relations. The speaker should not develop humor at the expense of any person's dignity. While he may poke gentle fun at himself, rarely can one poke fun at others without injuring their dignity and self-esteem. As with other purposeful speeches, speeches to entertain may be organized around the four-part outline discussed earlier:

- Introduction,
- Key idea,
- Body, and
- Conclusion.

STUDENT LEARNING ACTIVITIES

- Prepare a list of principles affecting delivery, and a list of principles affecting human relations. Develop checklists for evaluating the speech of others based upon these principles.
- Participate in informal conversation with two others before the class. No topic should be decided in advance. Following the conversation, participate in a class critique of the conversation.
- Participate in two interview situations set up by your teacher. In one, function as the interviewer; in the other, as the interviewee.
- Participate in a round table discussion on a problem assigned by your teacher.
- Participate in a panel-forum on a problem assigned by your teacher.
- Participate as a member of a symposium-forum on a problem assigned by your teacher.
- Prepare and present a 5-minute oral report on a topic assigned by your teacher.
- Prepare and present a 5-minute lesson on a subject assigned by your teacher.
- Prepare and present a 5-minute persuasive or motivational speech on a subject assigned by your teacher.
- Prepare and present a 5-minute speech to entertain the class.
- Participate in critiques of the speeches and discussions involving other students. Use principles of delivery and human relations as the basis for your criticism.

TEACHER MANAGEMENT ACTIVITIES

- Have each student develop checklists for critiquing oral communications based upon the principles of delivery and human relations discussed in the first topic. Through class discussion, develop a checklist evaluation form which will be used by the class for evaluating speech performance.
- Have students in groups of three participate in informal conversations. Topics should not be decided in advance. The setting should be informal as possible. But the conversation should be observed and evaluated by members of the class. "Buzz" groups may be formed, with teams of "evaluators" "dropping in" to the groups.
- Assign interview situations to pairs of students, designating the interviews and the interviewees. Students should be given ten or fifteen minutes to prepare for their part of the interview. Interviews should be critiqued by the class.

- Assign students to round table panel, and symposium groups. Assign each a problem to discuss. Have each group discuss its problem before the class. Critique the discussions.
- Have each student prepare a five-minute report, a five-minute lesson on some subject, a five-minute persuasive speech, a five-minute entertainment speech, on topics you approve. Presentations should be evaluated by the class using the critique forms developed by the class.

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Unit 2

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Unit 2

WRITTEN COMMUNICATIONS

INSTRUCTIONAL OBJECTIVES

1. Ability to write legibly.
2. Ability to fill out forms and applications correctly.
3. Ability to take messages and notes accurately.
4. Ability to write letters effectively.
5. Ability to write directions and instructions clearly.
6. Ability to outline written and spoken information.
7. Ability to persuade or teach others through written communication.
8. Ability to write effective overviews and summaries.
9. Ability to make smooth transitions within written communications.
10. Ability to use language forms appropriate for the reader.
11. Ability to prepare effective informational reports.

CONTENT

INTRODUCTION

Public-service employees are required to prepare written communications for a variety of purposes. Written communication is a fundamental tool, not only for the public-service occupations, but throughout the world of work. Many public-service occupations require written communication with ordinary citizens of diverse backgrounds, so the trainee should develop the ability to write in simple, nontechnical language that the ordinary citizen will understand.

This unit is designed to develop the student's ability to communicate effectively in writing for a number of different purposes and in a number of different formats. Whatever the particular purpose or format, however, effective writing will require the writer:

- to have a clear idea of his purpose and his audience;
- to organize his thoughts and information in an orderly way;
- to express himself concisely, accurately, and concretely;
- to report relevant facts;
- to explain and summarize ideas clearly; and
- to evaluate the effectiveness of his communication.

BUSINESS WRITING

Several forms of written communication tend to recur frequently in most public-service agencies, including:

- letters
- forms
- memoranda
- minutes of meetings
- short reports
- telegrams and cables
- news releases
- and many others

The public-service employee should be familiar with the principles of writing in these forms, and should be able to apply them in preparing effective communications.

Letters

Every letter sent from a public-service agency should be considered an ambassador of goodwill. The impression it creates may mean the difference between favorable public attitudes or unfavorable ones. It may mean the difference between creating a friend or an enemy for the agency. Every public-service employee has a responsibility to serve the public effectively and to provide services in an efficient and courteous manner. The letters an agency sends out reflect its attitudes toward the public.

The impression a letter creates depends upon both its appearance and its tone. A letter which shows erasures and pen written corrections gives an impression that the sending agency is slovenly. Similarly, a rude or impersonal letter creates the impression that the agency is insensitive or unfeeling. In preparing letters, the employee should apply principles of

style and tone which will serve to create the most favorable impression.

Select the Letter Type. The two most common types of business letters are letters of inquiry and letters of response - that is, "asking" letters and "answering" letters. Whichever type of letter the employee is asked to write, the following guidelines will simplify the task and help to achieve a style and tone which will create a favorable impression on the reader.

Select the Right Format. Several styles of letter format are in common use today, including:

- the indented format,
- the block format, and
- the semi-block format.

Modified forms of these are also in use in some offices. The student should become familiar with the formats preferred for usage in his office, and be able to use whichever form the employer requests.

Know the Letter Elements. Every letter includes certain basic elements, such as:

- the letterhead, which identifies the name and address of the sender.
- the date on which the letter was transmitted.
- the inside address, with the name, street, city, and state of the addressee.
- the salutation, greeting the addressee.
- the body, containing the message.
- the complimentary close, the "good-bye" of the business letter.
- the signature, handwritten by the sender.
- the typed signature, the typewritten name and title of the sender.

In addition, several other elements are occasionally found in business letters:

- the *attention line*, directing the letter to the attention of a particular individual or his representative.
- the *subject line*, informing the reader at a glance of the subject of the letter.

- the *enclosure notation*, noting items enclosed with the letter.
- the *carbon-copy notation*, listing other persons who receive copies of the letter.
- the *postscript*, an afterthought sometimes (but not normally) added following the last typed line of the letter.

Be Brief. Use only the words which help to say what is needed in a clear and straightforward manner. Do not repeat information already known to the reader, or contained elsewhere in the letter. Likewise, do not repeat information contained in the letter being answered. Rather than repeat the content of a previous letter, one can say something like, "Please refer to our letter dated March 5."

An employee can shorten his letters by using single words that serve the same function as longer phrases. Many commonly used phrases can be replaced by single words. For example,

Phrase	Single word
in order to	to
in reference to	about
in the amount of	for, of
in a number of cases	some
in view of	because
with regard to	about, in

Similarly, avoid the use of adjectives and nouns that are formed from verbs. If the root verbs are used instead, the writing will be more concise and more vivid. For example,

Noun form	Verb form
We made an adjustment on our books	We adjusted our books
We are sorry we cannot make a replacement of	We are sorry we cannot replace
Please make a correction in our order	Please correct our order

Be on the lookout for unnecessary adjectives and adverbs which tend to clutter letters without adding information or improving style. Such unnecessary words tend to distract the reader and make it more difficult for him to grasp the main points. Observe how the superfluous words, italicized in the following

example, obscure the meaning: "You may be *very much* disappointed to learn that the *excessively large* demand for our *highly popular recent* publication, 'Your Income Taxes,' has led to an *unexpected* shortage of this *attractive* publication and we *sadly* expect they will not be replenished until *quite* late this year."

Summarizing, then, *a good letter is simple and clear, with short, simple words, sentences, and paragraphs. Related parts of sentences and paragraphs are kept together and placed in an order which makes it easy for the reader to follow the main thoughts.*

Be Natural. Whenever possible, use a human touch. Use names and personal pronouns to let the reader know the letter was written by a person, not an institution. Instead of saying, "It is the policy of this agency to contact its clients once each year to confirm their status," try this: "Our policy, Mr. Jones, is to confirm your status once each year."

Use Concrete Nouns. Avoid using abstract words and generalizations. Use names of objects, places, and persons rather than abstractions.

Use Active Verbs. The passive voice gives a motionless, weak tone to most writing. Instead of "The minutes were taken by Mrs. Smith," say, "Mrs. Smith took the minutes." Instead of "The plans were prepared by the banquet committee," say, "The banquet committee prepared the plans."

Use a Natural Tone. Many people tend to become hard, cold, and unnatural the moment they write a letter. *Communicating by letter should have the same natural tone of conversation used in everyday speech.* One way to achieve a natural and personal tone in the majority of letters is through the use of personal pronouns. Instead of saying, "Referring to your letter of March 5, reporting the non-receipt of goods ordered last February 15, please be advised that the goods were shipped as requested," say, "I am sorry to hear that you failed to receive the items you ordered last February 15. We shipped them the same day we received your letter."

Forms

In most businesses and public service agencies, repetitive work is simplified by the use of *forms.* Forms exist for nearly

every purpose imaginable: for ordering supplies, preparing invoices, applying for jobs, applying for insurance, paying taxes, recording inventories, and so on.

While the forms encountered in different agencies may differ widely, several principles should be applied in completing any form:

- *Legibility*. Entries on forms should be clear and legible. Print or type wherever possible. When space provided is insufficient, attach a supplementary sheet to the form.
- *Completeness*. Make an entry in every space provided on the form. If a particular space does not apply to the applicant, enter there the term "N/A" (for "not applicable"). The reader of the completed form will then know that the applicant did not simply overlook that space.
- *Conciseness*. Forms are intended to elicit a maximum amount of information in the least possible space. When completing a form, it is usually not necessary to write complete sentences. Provide the necessary information in the least possible words.
- *Accuracy*. Be sure the information provided on the form is accurate. If the entry is a number, such as a social security number or an address, double-check the correctness of the number. Be sure of the spelling of names, No one appreciates receiving a communication in which his name is misspelled.

Memoranda

The written communications passing between offices or departments are usually transmitted in a form known as *"interoffice memorandum."* The headings most often used on such "memos" are:

- TO: identifying the addressee,
- FROM: identifying the sender or the originating office,
- SUBJECT: identifying briefly the subject of the memo,
- DATE: identifying the date the memo was prepared.

Larger agencies may also use headings such as FILE or REFERENCE NO. to aid in filing and retrieving memoranda.

In writing a memo, many of the same rules for letter-writing may be applied. Both the appearance and tone of the memo should create a pleasing impression. The format should be neat and follow the standards set by the originating office. The tone should be friendly, courteous, and considerate. The language should be clear, concise, and complete.

Memos usually dispense with salutations, complimentary closings, and signatures of the writers. In most other respects, however, the memorandum will follow the rules of good letter-writing.

Minutes of Meetings

Most formal public-service organization conduct meetings from time to time at which group decisions are made about agency policies, procedures, and work assignments. The records of such meetings are called *minutes*.

Minutes should be written as clearly and simply as possible, summarizing only the essential facts and decisions made at the meeting. While some issue may have been discussed at great length, only the final decision or resolution made of it should be recorded in the minutes. Information of this sort is usually included:

- Time and place of the call to order,
- Presiding officer and secretary,
- Voting members present (with names, if a small organization),
- Approval and corrections of previous minutes,
- Urgent business,
- Old business,
- New business,
- Time of adjournment,
- Signature of recorder.

Minutes should be written in a factual and objective style. The opinions of the recorder should not be in evidence. Every item of business coming up before a meeting should be included in the minutes, together with its disposition. For example:

- "M/S/P (Moved, seconded, passed) that Mr. Thomas Jones take responsibility for rewriting the personnel procedures manual."
- "Discussion of the summer vacation schedule was tabled until the next meeting."
- "M/S/P, a resolution that no client of the agency should be kept waiting more than 20 minutes for an interview."

Note that considerable discussion may have surrounded each of the above items in the minutes, but that only the topic and its resolution are recorded.

Short Reports

The public-service employee often is called upon to prepare a short report gathering and interpreting information on a single topic. Reports of this kind are sometimes prepared so that all the relevant information may be assembled in one place to aid the organization in making certain decisions. Such reports may be read primarily by the staff of the organization or by others closely related to the decision-making process.

Reports may be prepared at other times for distribution to the public or to other agencies and institutions. These reports may serve the purpose of informing public opinion or persuading others on matters of public policy.

Whatever the purpose of the short report, its physical appearance and style of presentation should be designed to create a favorable impression on the reader. Even if the report is distributed only within the writer's own unit, an attractive, clear, thorough report will reflect the writer's dedication to his assignment and the pride he takes in his work.

Some guidelines which will assist the trainee in preparation of effective short reports include use of the following:

- A good quality paper;
- Wide and even margins, allowing binding room;
- An accepted standard style of typing;
- A title page;
- A table of contents (for more lengthy reports only);
- A graphic numbering or outlining system, if needed for clarity;
- Graphics and photos to clarify meaning when useful;
- Footnotes, used sparingly, and only when they contribute to the report;
- A bibliography of sources, using a standard citation style.

A discussion of the organization of content for informational reports follows later in this document.

Telegrams and Cables

From time to time messages of special urgency must be sent by public telegraph wires, cables, and radio. With this service, written communications may be exchanged worldwide within minutes at a cost not greatly more than for a letter.

The public-service employee should be familiar with the telegraph service and able to prepare written messages for this medium. The student should be familiar with the classes of service available: "full-rate service," "day letter," and "night letter," since the class of service will affect the style of writing.

Skill in preparing telegraph messages rests largely on the writer's ability to summarize. The essential information must be presented in the fewest possible words. Good messages would follow these guidelines:

- Omission of articles and prepositions unless essential to meaning,
- Use of verb forms of the fewest words,
- Use of single words rather than phrases,
- Omission of unnecessary information and words.

For example:

> "I am taking American Airlines Flight 222 from Chicago at 8:15 Wednesday evening and will arrive at Los Angeles International Airport at 10:15. I would appreciate it if you would meet me."

Can be compressed to:

> "Arriving American 222 Los Angeles International Wednesday 10:15 PM. Please meet."

The minimum charge on a full-rate telegram is based upon 15 words. The student should develop skill in writing 15-word summaries in telegraph style.

News Releases

From time to time, the public-service employees may be called upon to prepare a news release for his agency. Whenever the activities of the agency are newsworthy or of interest to the public, the agency has an obligation to report such activities to the press. The most common means for such reporting is by using the press release. Most newspapers and broadcasting stations are initially informed of agencies' activities by news releases distributed by the agencies themselves. Thus, the news release is a basic tool for communicating with the public served by the agency.

The news release is written in news style, with these basic characteristics:

- Sentences are short and simple.
- Paragraphs are short (one or two sentences) and relate to a single item of information.
- Paragraphs are arranged in *inverted order* - the most important in information appears first.
- The first or *lead* paragraph summarizes the entire story. If the reader went no further, he would have the essential information.
- Subsequent paragraphs provide further details, the most important occurring first.
- Reported information is attributed to sources; that is, the source of the news is reported in the story.
- The expression of the writer's opinions is scrupulously avoided.
- The 5 W's (who, what, why, where, when) are included.

News releases should be typed double spaced on standard 8½ x 11 paper, with generous margins and at least 2" of open space above the lead paragraph. Do not write headlines - that is the editor's job. At the top of the first page of the release include the name of the agency releasing the story and the name and phone number of the person to contact if more information is needed. If the release runs more than one page, end each page with the word "-more-" to indicate that more copy follows. End the release with the symbols "###" to indicate that the copy ends at that point.

Accuracy and physical appearance are essential characteristics of the news release. Typographical errors, or errors of fact, such as misspelled names, lead editors to doubt the reliability of the story. Great care should be taken to assure the accuracy and reliability of a news release.

REPORTING ON A TOPIC

At one time or another, most public-service employees will be asked to prepare a report on some topic. Usually the need for the report grows out of some policy decision contemplated by the agency for which full information must be considered. For example:

- Should the agency undertake some new project or service?
- Should working conditions be changed?
- Are new specialists needed on the staff?
- Or should a branch office be opened up?

Or any of a hundred other such decisions which the agency must make from time to time.

When called upon to prepare such a report, the employee should have a model to follow which will guide his collection of information and will help him to prepare an effective and useful report.

As with other forms of written communication, both the physical appearance and content of the report are important to create a favorable impression and to engender confidence. The physical appearance of such reports has been discussed earlier; additional suggestions for reports are given in Unit 3. Basic guidelines follow below for organizing and preparing the content.

Preparation for the Report

What is the Purpose of the Report? The preparer of the report should have clearly in mind why the report is needed:

- What is the decision being contemplated by the agency?
- To what use will the report be put?

Before beginning to prepare the report, the writer should discuss its purpose fully with the decision-making staff to articulate the purpose the report is intended to serve. If the employee is himself initiating the report, it would be well to discuss its purpose with colleagues to assure that its purpose is clear in his own mind.

What Questions Should the Report Answer? Once the purpose of the report is clear, the questions the report must answer may begin to become clear. For example, if the decision faced by the agency is whether or not to offer a new service, questions may be asked such as these:

- What persons would be served by the new service?
- What would the new service cost?
- What new staff would be needed?
- What new equipment and facilities would be needed?
- What alternative ways exist for offering the service?
- How might the new service be administered?

And so on. Unless the purpose of the report is clear, it is difficult to decide what specific questions need to be answered. Once the purpose is clear, these questions can be specified.

Where Can the Relevant Information be Obtained? Once the questions are clear in the writer's mind, he can identify the information he will need to answer them. Information may usually be obtained from two general sources:

- *Relevant documents.* Records, publications, and other reports are often useful in locating the information needed to answer particular questions. These may be in the files of the writer's own agency, in other agencies, or in libraries.
- *Personal contacts.* Persons in a position to know the needed information may be contacted in person, by phone, or by letter. Such contacts are especially important in obtaining firsthand accounts of previous experience.

The Text of the Report

What are the Answers to the Questions? Once the relevant information is in hand, the answers to the questions may be assembled.

- What does the information reveal? This activity amounts to summarizing the information obtained. It often helps to organize this summary around the specific questions asked by the report. For example, if the report asks in one part, "What are the costs of the new service likely to be?" one section of the report should summarize the information gathered to answer this question.

Organizing the Report. The organization of a report into main and sub-sections depends upon the nature of the report. Reports will differ widely in their organization and treatment. In general, however, the report should generally follow the pattern previously discussed. That is, reports which generally include the following subjects in order will be found to be clear in their intent and to communicate effectively:

- *Description of problem or purpose.* Example: "One problem facing our agency is whether or not we should extend our hours of operation to better serve the public. This report is intended to examine the problem and make recommendations."
- *Questions to be answered.* Example: "In examining this problem, answers were sought to the following questions: What persons would be served? What would it cost? What staff would be needed?"
- *Information sources.* Example: "To answer these questions, letters of complaint for the past three years were examined. Interviews with clients were conducted by phone and in per-

son, phone interviews were conducted with the agency directors in Memphis, Philadelphia, and Chicago."

- *Summary of findings.* Example: "At least 25 percent of the agency's clients would be served better by evening or Saturday service. The costs of operating eight hours of extended service would be negligible, since the service could be provided by rescheduling work assignments. The present staff report they would be inconvenienced by evening and Saturday work assignments."

The Writer's Responsibilities. It is the writer's responsibility to address finally the original purpose of the report. Once the questions have been answered, an informed judgment can be made as to the decision facing the agency. It is at this stage that the writer attempts to draw conclusions from the information he has gathered and summarized. For example, if the original purpose of the report was to help make a decision about whether or not the agency should offer a new service, the writer should draw conclusions from the information and recommend either for or against the new service.

Conclusions and Recommendations. Example: "It appears that operating during extended hours would better serve a significant number of clients. The writer recommends that the agency offer this new service. The present staff should be given temporary assignments to cover the extended hours. As new staff are hired to replace separating persons, they should be hired specifically to cover the extended hours."

PERSUASIVE WRITING

Often in life, people are called upon to persuade individuals and groups to adopt ideas believed to be good, or attitudes favorable to ideas thought to be worthwhile or behavior believed to be beneficial. The public service employee may find he must persuade the staff of his own agency, his superiors, the clients of the agency, or the general public in his community.

Persuading others by means of written and other forms of communication is a difficult task and requires much practice. Some principles have emerged from the study of persuasion which may provide some guidelines for developing a model for persuasive writing.

General Guidelines for Writing Persuasively

Know the Credibility of the Source. People are more likely to be persuaded by a message they perceive originates from a trustworthy source. Their trust is enhanced if the source is seen as authoritative, or knowledgeable on the issue discussed in the message. Their trust is increased also if the source appears to have nothing to gain either way, has no vested interest in the final decision. Then, the assertions made in persuasive writing should be backed up by referencing trustworthy and disinterested information sources.

Avoid Overemotional Appeals. Appealing to the common emotions of man - love, hate, fear, sex, etc. - can have a favorable effect on the outcome of a persuasive message. But care should be taken because, if the appeal is too strong, it can lead to a reverse effect. For example, if an agency wanted to persuade the public to get chest X-rays, it would have much greater chance of success if it adopted a positive and helpful attitude rather than trying to frighten them into this action. For instance, appealing mildly to the sense of well-being which accompanies knowledge of one's own good health, instead of shocking the public by showing horror pictures of patients who died from lack of timely X-rays.

Consider the Other Man's Point of View. To persuade another to one's own point of view, should the writer include information and arguments contrary to his own position? Or should he argue only for his own side?

Generally, it depends on where most of the audience stand in the first place. If most of the audience already favor the position being advocated, then the writer will probably do better including only information favorable to his position. However, if the greater part of the audience are likely to oppose this position, then the writer would probably be better off including their arguments also. In this case, he may be helping his cause by rebutting the opposing arguments as he introduces them into the writing.

An example of this technique might occur in arguing for such an idea as a four-day, forty-hour workweek. Thus: "Many people feel that the ten-hour day is too long and that they would arrive home too late for their regular dinner hour. But think! If you have dinner a littler later each night, you'll have a three-day weekend every week. More days free to go fishing, or camping. More days with your wife and children." That is good persuasive writing!

Interpersonal Communications

The important role of interpersonal communication in persuading others - face-to-face and person-to-person communications - has been well documented. Mass mailings or printed messages will likely have less effect than personal letters and conversations between persons already known to each other. In any persuasion campaign the personal touch is very important.

An individual in persuading a large number of persons will likely be more effective if he can organize a letter-writing campaign of persuasive messages written by persons favorable to his position to their friends and acquaintances, than if his campaign is based upon sending out a mass mailing of a printed message.

Conditions for Persuading. In order for an audience of one or many to be persuaded in the manner desired, these conditions must be met:

- the audience must be *exposed* to the message,
- members of the audience must *perceive* the intent of the message,
- they must *remember* the message afterwards,
- each member must *decide* whether or not to adopt the ideas.

Each member of the audience will respond to a message differently. While every person may receive the message, not everyone will read it. Even among those who read it, not everyone will perceive it in the same way. Some will remember it longer than others. Not everyone will decide to adopt the ideas. These effects are called *selective exposure, selective perception, selective retention,* and *selective decision.*

The Persuasion Campaign. How can one counteract these selective effects in persuading others? One thing that is known is that *people tend to be influenced by persuasive messages which they are already predisposed to accept.* This means a person is more likely to persuade people a little than to persuade them a lot.

In planning a persuasion campaign, therefore, the messages should be tailored to the audiences. Success will be more likely if one starts with people who believe *almost* as the writer wants to persuade them to believe - people who are most likely to agree with the position advocated.

The writer also wants to use arguments based on values the particular audience already accepts. For example, in advo-

cating a new teen-age job program, he might argue with business men that the program will help business; with parents, that it will build character; with teachers, that it is educational; with taxpayers, that it will reduce future taxes; and so on.

The idea is to find some way to make sure that each member of the particular audiences reached can see an advantage for himself, and for the writer to then tailor the messages for those audiences.

INSTRUCTIONAL WRITING

Another task that the public-service employee may expect to face from time to time is the instruction of some other person in the performance of a task. This may sometimes involve preparing written instructions to other employees in the unit, or preparing a training manual for new employees.

It may sometimes involve preparing instructional manuals for clients of the unit, such as "How to Apply for a Real Estate License," "How to Bathe your Baby," or "How to Recognize the Symptoms of Heart Disease."

Whatever the purpose or the audience, certain principles of instruction may be applied which will help make more effective these instructional or training communications. These are: *advance organizers, practice, errorless learning,* and *feedback.*

Advance Organizers

At or near the beginning of an instructional communication, it helps the learner if he is provided with what can be called an "advance organizer." This element of the communication performs two functions:

- it provides a framework or "map" for the leader to organize the information he will encounter,
- it helps the learner perceive his purpose in learning the tasks which will follow.

The first paragraphs in this section, for example, serve together as an advance organizer. The trainee is informed that he may be called upon to perform these tasks in his job *(perceived purpose)*, and that he will be instructed in advance organizers, practice, errorless learning, and feedback *(framework, or "map")*.

Practice

The notion of *practice makes perfect* is a sound instructional principle. When trying to teach someone to perform a task by means of written communication, the writer should build in many opportunities for practicing the task, or parts of it. This built-in practice should be both appropriate and active:

- *Appropriate practice* is practice which is directly related to learning the tasks at hand.
- *Active practice* is practice in actually performing the task at hand or parts of it, rather than simply reading about the task, or thinking about it.

By inserting questions into the text of the communication, by giving practice quizzes, exercises, or field work, one can build into his instructional communication the kind of practice necessary for the reader to readily learn the task.

Errorless Learning

The practice given learners should be easy to do. That is, they should not be asked to practice a task if they are likely to make a lot of mistakes. When a mistake is practiced it is likely to recur again and again, like spelling "demons," which have been spelled wrong so often it's difficult to recall the way they should be spelled. Because it is better to practice a task right from the first, it is important that learners do not make errors in practice.

- One method for encouraging correct practice is to give the reader hints, or *prompts*, to help him practice correctly.
- Another method is to instruct him in a logical sequence a little bit at a time. Don't try to teach everything at once. Break the task down into small parts and teach each part of the task in order. Then give the learner practice in each part of the task before giving him practice in the whole thing.
- A third way of encouraging errorless learning is to build in practice and review throughout the communication. The learner may forget part of the task if the teacher doesn't review it with him from time to time.

Remember, people primarily learn from what they do, so build in to the instructional communication many opportunities for the learner to practice correctly all of the parts of the task required for learning, first separately and then all together.

Feedback

The reader, or learner, can't judge how well he is learning the task unless he is informed of it. In a classroom situation, the teacher usually confirms that the learner has been successful, or points out the errors he made, and provides additional instruction. An instructional communication can also help learners in the same way, by providing *feedback* to the learner.

Following practice, the writer should include in his instructional communication information which will let the reader know whether he performed the task correctly. In case he didn't, the writer should also include some further information which will help the reader perform it correctly next time. This feedback, then, performs two functions:

- it helps the learner confirm that his practice was done correctly, and
- it helps him correct his performance of the task in case he made any errors.

Feedback will be most helpful to the learner if it occurs immediately following practice. The learner should be brought to know of his success or his errors just as soon as possible after practice.

STUDENT LEARNING ACTIVITIES

- Write "asking" and "answering" letters, and answer a letter of complaint, using the format assigned by the teacher.
- Write memoranda to other "offices" in a fictitious organization. Plan a field trip using only memos to communicate with other students in the class.
- Take minutes of a small group meeting. Or attend a meeting of the school board and take minutes.
- Write a short report on a public service occupation of special interest to you.
- Write a 15-word telegram reserving a single room at a hotel and asking to be picked up at the airport.
- Write a news release announcing a new service offered to the public by your agency.
- Based upon hearing a reading or pretaping of a report, summarize the report in news style.
- View films on effective communication, for example, *Getting the Facts*, *Words that Don't Inform*, and *A Message to No One*.
- For a given problem or purpose, compile a list of specific questions you would need to answer to write a report on the topic.

- For a given list of questions, discuss and compile a list of information sources relevant to the questions.
- As a member of a group, consider the problem of "What field trip should the class take to help students learn how to write an effective news release?" What questions will you need to answer? Where will you obtain your information?
- As a member of a group, gather the information and prepare a short report based on it for presentation to the class.
- Write a report on a problem assigned by your teacher.
- Write a brief persuasive letter to a friend on a given topic. Assume he does not already agree with you. Apply principles of source credibility, emotional appeals, and one or both sides of the issue to persuade him.
- Plan a persuasive campaign to persuade a given segment of your community to take some given action.
- Write a short instructional communication on a verbal learning task assigned by your teacher.
- Write a short instructional communication on a learning task which involves the operation of equipment.
- Try your instructional communications with a fellow student to check for errors during practice.

TEACHER MANAGEMENT ACTIVITIES

- Have students practice letter writing. Assign letters of "asking" and "answering." Read them a letter of complaint and ask them to write an answering letter. Establish common rules of format and style for each assignment. Change the rules from time to time to give practice in several styles.
- Have small groups plan an event, such as a field trip, assigning the various tasks to one another using <u>only</u> memoranda. Evaluate the effectiveness of each group's memo writing by the speed and completeness of their planning.
- Have the class attend a public meeting. Assign each the task of taking the minutes. Evaluate the minutes for brevity and completeness.
- Encourage each student to prepare a short report on a public service occupation of special interest to himself.
- Give the students practice in writing 15-word telegrams.
- Have the students prepare a news release announcing some new service offered to the public, such as "Taxpayers can now obtain help from the Internal Revenue Service in completing their income tax forms as a result of a new service now being offered by the agency."
- Give the students practice in summarizing and writing leads

by giving them the facts of a news event and asking them to write a one or two-sentence lead summarizing the significant facts of the event.

- Read a speech or a story. Have students write a summary and a report of the speech or story in news style.
- Show films on effective communication, for example, *Getting the Facts*, *Words that Don't Inform*, and *A Message to No One*.
- State a general problem and have each student prepare a list of the specific questions implied by the problem.
- State a list of specific questions and discuss with the class the sources of information which might bear upon each of the questions.
- Have small groups consider and write short reports jointly on the general problem, "What field trip should the class take to help students learn how to write an effective news release?" Have each group identify the specific questions to be answered, with sources for needed information.
- Have each student identify and prepare a short report on a general problem of interest.
- Assign students to work in groups of three or four to draft a letter to a friend to persuade him to make a contribution to establish a new city art museum.
- Assign the students to groups of five or six, each group to map out a persuasive campaign on a given topic. Some topics are "Give Blood," "Get Chest X-Ray," "Quit Smoking," "Don't Litter," "Inspect Your House Wiring," etc.
- Have each student identify a simple verbal learning task and prepare an instructional communication to teach that task to another student not familiar with the task.
- Have each student prepare an instructional manual designed to train someone to operate some simple piece of equipment, such as an adding machine, a slide projector, a tape recorder, or something of similar complexity.
- Have each student try his instructional communication out on another student, unfamiliar with the task. He should observe the activities and responses of the trial student to identify errors made in practice. He should revise the communication, adding practice, review, and prompts wherever needed to reduce errors in practice.

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Unit 3

BASIC REPORT WRITING

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Unit 3

BASIC REPORT WRITING

INSTRUCTIONAL OBJECTIVES

1. Ability to understand how reports are used.
2. Ability to form an appreciation for the importance of effective report writing in public service occupations.
3. Ability to define and differentiate between the types of reports.
4. Ability to select the proper form for a report.
5. Ability to recognize the steps in preparing a good report.
6. Ability to demonstrate a knowledge of correct word usage and its importance in a report.
7. Ability to demonstrate the proper grammatical structure in report writing.
8. Ability to explain the importance of using a dictionary in report writing.

CONTENT

INTRODUCTION

A report is the communication of information in the most convenient form to someone who wants or needs it. It is difficult to overstate the importance of reports in our complex society today. They provide the data on which far-reaching decisions and policy are determined. A report that is not accurate or that is incomplete may cause the writer and the receiver misunderstanding, antagonism, and costly errors. Repeated errors in reports may well cost the writer his position.

Many of the reports that public service workers make are oral

ones. However, the more important reports are always required to be in writing.

A report is always addressed to someone - the audience. The audience is usually a superior who needs the information to determine what action to take or what recommendations to pass on to his superior. The good report writer analyzes the audience to which the report will be directed.

- Should the report be a formal document or should the report be an informal memo?
- How will the audience use the report?
- Will it be passed along to others in the organization, or people in other areas?

The report writer's answers to questions such as these may well determine the format that is selected for the report.

TYPES OF REPORTS

The Formal Report. Formal reports usually follow a format prescribed by the agency or department. A central office typically supplies the form on which the report is to be prepared and submitted. A copy of a previous report is frequently used as a guideline in preparing the new one. This procedure saves considerable time and makes it easier for the central office to analyze and interpret the information contained in the report.

The Informal Report. Another type of report, the informal one, frequently takes the form of a note or memo requesting additional supplies, services, or providing suggestions for the supervisor or a fellow worker. The informal report could possibly contain abbreviations, first names, and technical jargon that would be meaningless to anyone not acquainted with the situation in which it was written.

The Semi-Formal Report. A semi-formal report fits between the casual or informal memo and the highly structured and authoritative formal report. The semi-formal report is to be considered more important than the informal one and consequently is written with more thought and care than the informal report.

EXAMPLES OF REPORTS

School Setting. The various types of reports may be illustrated in school settings:

- *The Formal Report*. Progress reports, attendance reports, accident reports, and classroom reports prepared by students; these are all examples of well-structured formal reports. The importance of such reports is great. For example, the attendance reports determine how many teachers will be added or deleted from the faculty, in addition to being the basis for computing the state's financial contribution to the local school district.

- *The Semi-Formal Report* is illustrated by the office referral requesting action because of a student's behavior. It may result in a student-administrator conference, a parent conference, or even student suspension from school.

- *The Informal Report*. The note that a teacher leaves in the school mail for the staff assistant in charge of audiovisual equipment requesting service on the malfunctioning movie projector is an example of an informal report.

Public Service Agencies. The public-service report writer will find that he is writing:

- About specific subjects, and about various technicalities or events associated with the governmental agency or a responsibility assigned to it.
- With certain formal elements, such as the technical vocabulary of the department and the use of forms prepared by the department or agency.
- With an attitude of impartiality and objectivity, taking extreme care to convey information accurately and concisely, and with no attempt to arouse emotions.

Police Reporting - An illustration which would be meaningful to students may be made by examining what a policeman would include in a report when investigating an automobile accident. The policeman's report must contain such specific facts as:

- The names, addresses, phone numbers, ages, drivers' license numbers, and the identification of witnesses to the accident.
- Where the accident occurred - address.
- Description of the accident scene.
- The witnesses' observations - obtaining not only their account of events, but from what point they observed the event, and what they were doing at the time.
- Time and day of the accident.
- Weather conditions at the time of accident.

- The location of traffic signals, stop signs, skid marks, traffic lanes, etc.
- Description of the injuries, if any, or lack of apparent injuries.
- Description of the automobiles involved and apparent damages.

The investigating officer will have a pad of accident report forms which will outline the information needed. This insures that in the emotion and tension of the accident scene the investigating officer will be reminded of the information that he needs to include in the report. Numbers will be used to code certain information. This speeds up the writing, simplifies the recording and filing of the information, and makes the report less emotional.

The accident report will be of major importance when the insurance companies settle the claim. If there is a dispute over the settlement, the police report will be entered into the court record. The officer who wrote the report will also have to testify. The testimony may not be called for years after the accident and the officer will have to use the report to refresh his memory. It would probably be difficult for the officer otherwise to recall all of the events or even to notice them all at the time, as he may have had to direct traffic, administer first aid, call an ambulance, and keep curious bystanders out of the way. Even though human life may have been lost or saved by the policeman's actions on the scene, the primary issues in which the court or insurance adjusters will be interested are the facts in his report.

Other Reporting Areas - There are other workers in the public service area, such as teachers' aides, recreation aides, and forestry aides, who are likely to be required to complete accident reports while on the job. While their reports may not be as sensational as the police report, they are important and may be used in subsequent litigation.

It should also be pointed out that any report may have far-reaching ramifications. However, it is wise to be especially careful if a financial settlement between two adversaries will be affected by the report.

THE REPORT WRITER

Regardless of the type of report that is being prepared, the key to a good report is a good writer. The writer is the prime mover of the entire process. He gathers the material, interprets it, organizes it, and chooses the vocabulary. The writer imposes meaning merely by determining whether to make the report a formal, a semi-formal, or an informal one.

The reader is led to an understanding by an orderly presentation of the facts. The facts are determined by the writer's examination and observations of the situation or activity. The report's validity hinges upon the competence and objectivity of the writer and the accuracy of his observations.

Competence in report writing means that an individual has acquired the technique of careful inquiry. This may be illustrated by the police officer at the scene of the accident. He will take statements from witnesses, take measurements of skid marks, inspect and record the automobiles' registrations, and inspect the scene of the accident for real evidence that may have been instrumental in the cause of the accident, such as flat tires, conditions of the tires on the automobiles, mechanical defects, health of the drivers, etc. The report writer must acquire the habit of orderly thinking from problems to solutions, and learn to write an exact statement.

A good report communicates clear ideas in simple language. The organization is orderly and fast moving. It is easy to read and uses visual aids where they will best carry forward the message. These skills are required of almost every member of governmental agencies. Management quickly recognizes competence in the preparation of reports. The individual who writes them well will assume a position of leadership at every level where accurate data supplies the basis for a difficult decision.

CHOOSING BEST WORDS

A major aspect of clear and concise report writing is being careful to select the proper word to express the thought exactly.

Use Proper Word for Intended Meaning. Since any one word may have a number of different meanings in different contexts, the writer must be certain that the word chosen is appropriate to convey the intended meaning within the human situation in which it is used. Paul Douglas, in his book *Communicating Through Reports*, illustrates this point with "word." He lists twelve different meanings, ranging from the preacher expounding the *Word* (scripture) to the wife's having the *last word* (decision). This relationship of meaning to the environment and circumstances of its use is known as *context*.

Nearly all words mean more than they seem to mean; they possess associative meanings, almost outlying areas of suggestive values. The bare dictionary meaning of a word is its *denotation*. The *connotation* of a word relates to the suggestions and associations which have surrounded it.

For example, a dictionary definition of the word "gold" is "a precious yellow metal which is highly malleable and ductible. This is its denotation. But along with its denotative meaning, gold has also been associated with wealth, value, color, and power. These characteristics are the connotations of gold.

Beyond the core of the dictionary definition are suggestions, associations, and implications. Connotations must be watched as they have practical consequences for the report writer. Words and phrases with unpleasant connotations may become fighting words which blind the reader to anything else in the report. The following words are a few that have negative suggestions: mistakes, inefficient, death, refuse, error, rejecting, prohibited, unfair, poor judgment, and failed.

The writer may avoid irritation by choosing words with positive or neutral connotations. Note the difference in meaning of the following words:

- car, automobile, limousine
- inebriated, intoxicated, drunk
- portly, stout, obese
- smell, smell bad, stink
- slow, lazy, sluggish
- firm, obstinate, pigheaded
- Negro, colored man, black man
- dog, hound, mongrel

To use words both accurately and effectively, one must understand their connotations as well as their denotations. Social welfare aides, employment service workers, and probation services aides need to be especially alert to those words which are unique to the groups of people they serve. When wishing to express something with literal accuracy, the report writer will rely wholly upon the standards set by the department or dictionary definitions.

<u>Eliminate Slang in Reports</u>. *Slang should not be used in reports except when reporting dialogue.* There are several reasons for not using slang:

- First, many slang words and expressions are so short-lived that they will be outmoded before the report will have lived its useful life.

- Second, the use of slang expressions may be an excuse for not searching for the exact words to express the meaning.

Many slang expressions are only rubber stamps; to refer to a person as a "dude" hardly expresses exactly any critical judgment or intelligent description. To argue that such a word conveys precisely the intended meaning is to reveal a poverty of vocabulary, or careless thinking and laxness. The most serious charge against slang is that it becomes a substitute for thinking. Public service workers are likely to encounter the following slang:

- grubby
- get burned
- the boss
- real cool dude
- far out
- right on
- groovy
- bummer
- a drag
- rip off
- split
- low rider
- doing your own thing
- busted

The list could go on indefinitely. It would be very difficult to get a widely acceptable definition for any one of the above slang words. *Slang does express feeling, but when writing reports, the main concern is facts, not feelings.*

CHOOSING BEST PHRASES

Don't Use Weasel Words. Other words to avoid in writing reports are what some authors call "weasel words." *A weasel word is a phrase that rids the writer of any responsibility for a statement.* By the use of the weasel word, the writer attempts to wriggle out of a position of accountability for an observation, inference, or statement, as may be seen by these examples:

- It would be difficult to estimate . . .
- It is too early to say whether . . .
- It is generally believed that . . .
- It would appear that . . .
- There may be a tendency toward . . .

Weasel words are usually used with the passive voice, which is discussed later in this unit under "Writing Sentences."

Clichés to Avoid. Public-service workers, like many other report writers, too often use words and phrases which are trite, outworn, commonplace, and flat stereotypes. Here are some examples of cliches which should be avoided:

- It certainly merits study . . .
- We will see what may be done . . .

- This suggestion certainly has merit . . .
- The matter is receiving our closest attention . . .
- We will explore every avenue . . .
- The handwriting on the wall . . .
- Let's get down to brass tacks . . .
- Naturally, the child's interest is our concern . . .
- Fools rush in . . .
- In the last analysis . . .
- No thinking man . . .
- The skeleton in the closet . . .
- Let sleeping dogs . . .

Cliches are similar to slang in that they are but rubber stamps, "stereotyped plates" of thought and expression. They save the writer the trouble of thinking exactly what he means. Consequently, they get in the way of clear and concise report writing.

Don't Use Excess Wordage. Diction, to be effective, must be as economical as possible. Necessary words should not be omitted nor should the report be sketchy. However, wordiness should be avoided as it lessens the force of expression. *In forceful writing, the ratio of ideas to words is high.* Conciseness alone will not achieve effective writing, but it is extremely difficult to write forcefully if you use two or three words to convey the idea which one word would express. Note these examples of excess or "superfluous" words:

- absolutely parallel
- first beginnings
- free gratis
- someone I met up with
- perfect circle
- the sunset in the west
- resume again
- join together

Don't be Pompous. When it is possible to reduce a group of words to a single word, it should be done. Here are some examples of economy in diction that are achieved by reducing pompous phrases to more natural words:

Pompous	Natural
in the nature of	like
for the purpose of	for
prior to	before
subsequent to	after
despite the fact that	though
give consideration to	consider
give instruction to	instruct

° is due in large measure to	° is due largely to
° confidential nature	° confidential information

WRITING SENTENCES

Be Simple. *One of the most important rules to follow in writing a report is to keep your sentences short, usually twenty words or less.* Language, like a machine, will be the most efficient when it operates on the principle that the more simple and better arranged the parts, the greater the effect which is produced. The subject-verb-object sentence is the best arrangement of parts in the simple report.

Keep Active. Verbs should be kept active. Avoid the passive voice; this puts excess words in a sentence, and its dullness derives as much from its extra wordage as from its impersonality. John was hit by Don says no more than Don hit John but takes 66 percent more words.

The passive voice's inevitable "was" and "by" do nothing but connect; worse, all the "was's" and "by's" and "has been's" actually get in the way of words carrying the meaning. It's like underbrush, it slows you down and hides what the report reader should see.

The passive voice, in its wordiness, is likely to be unclear even on the surface. When it eliminates the subject of the verb, as it usually does, it is intrinsically unclear. For example, a sentence written in the passive voice will often begin: "This evidence has been selected because...." The reader cannot tell who did the selecting. Does the writer mean that he picked it or does he describe some process of popular selection? It is usually surmised that the writer did the selecting, but why doesn't he say so and save a word and avoid confusion? "I selected this evidence because...." *The report writer should be careful not to leave the reader with any assumptions or implications.*

Don't be Wordy. Government writing is often noted for its wordiness. The following example is taken from a World War II price control regulation:

> "Ultimate consumer means a person or group of persons, generally constituting a domestic household, who purchase eggs generally at the individual stores or retailers or purchase and receive deliveries of eggs at the place of abode of the individual or domestic household from producers or retail route sellers and who use such eggs for their consumption or food."

This statement may be changed, without changing its meaning, by reducing it to:

"Ultimate consumers are people who buy eggs to eat them."

A good writer sees sharply what he wants to say, says directly what he sees, edits what he says, and takes pain to ease his reader's task. The example just given illustrates how much more readable a short sentence is than a long one.

WRITING A GOOD PARAGRAPH

The next major step after writing sentences is the construction of paragraphs. A good paragraph will clearly state the central ideas, it will fill in supporting details, and show how the central idea relates to the ideas which precede and follow it. The proper length of a paragraph is much like Abraham Lincoln's idea of a speech; it should be long enough to reach the end. There are exceptions, however. A report writer should be critical of his writing when a page of typewritten copy contains more than three or less than one complete paragraph.

Developing a Paragraph. There are many different ways of developing a paragraph in a report. The entry-level public-service worker may well utilize a variation of the following patterns of development:

- *Definition and description.* The writer gives his reader all the concepts he needs to follow the presentation.
- *Historical summary.* The writer briefs the reader on where the problem came from and why it is a problem. It provides a perspective for the problem.
- *Case history.* The report writer details an actual record for the reader.
- *Description of a process.* The report describes in detail how factors work together to produce a certain result.
- *Occasional summary.* The writer restates the essential data and ties facts together to clarify them for the reader.
- *Cause and effect.* The writer explains the forces that produce certain consequences.
- *Examination of alternatives.* The writer may present the material so that the reader can make an examination of alternatives and their possible consequences.
- *Directive.* The reader will be told what to do. The writer may describe steps to be taken.

Paragraph Construction. Regardless of the paragraph's development, a well-constructed paragraph will be correct, clear, and effective. Eight desirable paragraph characteristics are listed below:

- A good paragraph contains an implied or expressed topic sentence.
- A good paragraph is never sketchy or incomplete. It contains a complete body of thought.
- A good paragraph is mechanically correct. It is properly indented or otherwise set off. It correctly represents every change of speaker in dialogue.
- A good paragraph is unified. Extraneous details are eliminated.
- A good paragraph contains material arranged in proper order. Good arrangement of ideas demonstrates logical thinking on the part of the writer.
- A good paragraph should make orderly clear progress and there should be clear passage from one paragraph to another.
- A good paragraph will be of suitable length.
- A good paragraph is well proportioned to the importance of the content. The longest paragraph of the report should not deal with the least significant idea.

SPECIAL WORD FORMS

The report writer will need to know how to handle such other items as abbreviations and numbers, in addition to writing clear sentences in well constructed paragraphs.

Using Numbers Correctly. Nearly all reports contain numbers. Should the number be written out or should it be shown in figures? Many reports consist primarily of numbers. Such reports call for the use of figures. However, other reports which are not primarily numerical reports may leave the writer in doubt as to how the numbers should be shown. The following suggestions may be helpful:

- Numbers requiring the use of more than one word or a hyphenated word are usually written as figures.
- A number which begins a sentence is written as a word; if this is awkward or inconsistent with the rest of the text, replace the sentence.
- Numbers under ten are usually written as words unless they appear in writing which is full of numbers.

- Numbers that express dimensions are usually written as figures.
- Numbers which contain decimal fractions are always written as figures.
- Any number naming a common fraction is usually written as a hyphenated word.
- Numbers in any sentence in which other numbers are to occur in figure form are usually written in figures.
- Numbers that tell either time, date, or percentage are usually written in figures.
- Numbers above ten naming streets are usually written as figures with the indicators of pronounciation, -st, -nd, -th, attached.
- Round numbers, such as "thousands," are usually written as words except where numbers are occurring very frequently.
- Any number appearing occasionally and simple enough to express in one word is usually written as a word.
- Numbers appearing as two separate categories, one after the other, are usually written as words for the first category and as figures for the second. (five 2 x 4 boards)

The report writer should remember that the above guidelines are suggestions and that some of them may actually contradict each other. Common sense should determine whether or not a number be written as a figure or a word.

Using Abbreviations Correctly. Abbreviations are found more often in reports than in any other form of writing. Although the use of abbreviations is a healthy part of the style of field reports, it is definitely limited and kept in check by both tradition and common sense. *Only those abbreviations which will be easily understood by the reader are to be used.* Many agencies or departments will have a number of abbreviations that they use regularly, particularly in informal reports. Handbooks or manuals issued by the department will list these and the new worker should memorize them. The use of abbreviations has met with limited success because of the time saved in writing certain reports; the use should be very restricted in formal reports.

There are several rules regarding the general idea of permissible abbreviations in report writing:

- Whenever abbreviations have been used so long that they have assumed vocabulary status, they should be used. Some such abbreviations are Mr., Mrs., B.C., A.D., FBI, CIA, a.m., p.m. (Each job family will have a number of abbreviations of its own.)

- Whenever the names of units are preceded by numerals, it is usually best to abbreviate the names of the units. For instance:

  a. The auto was going 75-mph in the 25-mph zone.

  b. It was 65° F today.

  c. The unit has a 3-hp engine.

- If an abbreviation makes an English word (as for example, in. for inches), use a period. Otherwise, most good writers do <u>not</u> use periods in <u>most</u> cases.

If a term must be repeated many times in a report, that term calls for explanation and thereafter possible abbreviation, regardless of what it is.

<u>Using Contractions Correctly</u>. A contraction is a form of abbreviation. It is a word written with an apostrophe to indicate the omission of a letter. Contractions should be used very seldom in formal reports, but are common in semiformal and informal ones. Field reports are full of abbreviations and contractions as their use can greatly speed up the process of gathering data in the field.

<u>Using Capital Letters Correctly</u>. Report writing calls for no departure from the conventional rules for the use of capital letters. Proper names, names of cities and states, official titles, and organizations are always captalized. There are two practices common to reports:

- Capitalize all important words in titles, division headings, side headings, and captions. By "important" is meant all words except articles, prepositions, and conjunctions.

- Capitalize Figure, Table, Volume, Number as part of titles. Thus, reference would be made to Figure 4, Table 2, etc.

When in doubt, do not capitalize.

<u>Using Punctuation Correctly</u>. Clear communication is dependent upon yet another aspect of written language, punctuation. Every sentence begins with a capital letter, and ends with either a period, question mark, or exclamation point. Punctuation which does not contribute to the clarity of thought should be avoided. Most of the difficulties with punctuation arise out of the use of the comma, semicolon, and colon. For information on other punctuation, see any good handbook of grammar.

The Comma. The principal uses of the comma are:

- Between independent clauses connected by a coordinating conjunction (and, but, for, or, nor, yet). But if commas are used in any of the independent clauses constituting a sentence, a semicolon must be used between the clauses.
- After introductory clauses or phrases preceding the main clause of the sentence.
- Between items in a series.
- Around parenthetical phrases, appositives, and nonrestrictive modifiers.

The Semicolon. The semicolon is almost as strong a mark of separation as the period. It is chiefly used between the independent clauses not connected with one of the coordinating conjunctions, and between clauses connected with a coordinating conjunction which are long, or unrelated, or contain commas.

The Colon. The colon signals that something is to follow. It is a mark introducing lists, series, and quotations. It is used as a salutation in a business letter, in separating the hours and minutes in a statement of time, or in separating volume and pages in a bibliographical entry.

USING THE DICTIONARY IN REPORT WRITING

Dictionary Usage. The report writer should be aware of the fact that most dictionaries have a section listing the principal rules of capitalization, punctuation, and spelling. A dictionary should be considered one of the necessary tools for good report writing, together with the pencil and paper. The report writer should be using the dictionary for the following purposes:

- To determine the exact meaning of a word.
- To determine the correct spelling.
- To determine whether or not a word should be capitalized.
- To determine how a word should be divided at the end of a line.
- To determine correct pronunciation.
- To determine whether or not a hyphen should be used in a compound word.

Dictionary Content. In addition, the dictionary also has a list of common foreign words and phrases. It is obvious that

much of the material that a report writer must master is to be found in a dictionary. The excellent report writer has the ability to select the exact word. No one can buy, sell, write letters, use the telephone, give orders, make a speech, or prepare a report, except by using words. Everything else being equal, the individual who knows the most about words will be the most successful in his occupation. *To develop the mastery of language necessary to use the exact word, the writer must know how to use the dictionary skillfully and he must use it frequently.*

The dictionary is a tool that will always be needed by the educated person. As a matter of fact, the better educated a person is, the more likely he is to refer frequently to a dictionary.

Word Division. One use of the dictionary mentioned above is for determining the correct place to divide a word at the end of a line. Since more errors are made in dividing words at the end of a line than in spelling them, capitalizing them, or in using them, it is important that the report writer learn to divide words correctly. Below are eight rules for dividing words at the end of a line:

- Never divide a word of one syllable.
- Do not divide a word of four letters.
- A one-letter syllable at the beginning of a word, or a one or two-letter syllable at the end of a word must not be separated from the rest of the word. (Examples: "about" not "a-bout"; "ready" not "read-y.")
- When a word containing three or more syllables is to be divided at a one-letter syllable, the one-letter syllable should be written on the first line rather than on the second. (Example: "maga-zine" not "mag-azine.")
- When a word is to be divided at a point where two vowels that are pronounced separately come together, these vowels should be divided into separate syllables. (Example: "continu-ation" not "continua-tion.") Note that this rule is an exception to the one stated above.
- A syllable that does not contain a vowel must not be separated from the remainder of the word. (Example: "wouldn't" not "would-n't.")
- Avoid dividing hyphenated words, such as "self-conscious," except at the hyphen.
- When a final consonant is doubled before a suffix, the additional consonant should be placed with the suffix. (Example: "run-ning" not "runn-ing.")

When in doubt about the proper syllable makeup of a word, consult the dictionary. Do not guess at the division of a word.

SUMMATION

English grammar essentials, such as correct punctuation, capitalization, syllabication, and correct use of numbers and abbreviations, are all part of the skills that the successful report writer has at his disposal. The beginning public-service worker is well advised to obtain a list of the words that appear frequently in his job family, or are a part of the technical or professional vocabulary, and memorize them. Common report forms should be reviewed and used as a guide for making observations and examinations of data when preparing to write a report. The writer may find that maps are needed to show geographical location, charts to visualize statistical data, or tables to determine relationships. Clarity will be the guide dictating how any idea may best be communicated to the reader.

In conclusion, the report writer must know what details to look for, must select the proper format for the report, must select the best possible words that do not have any emotional connotations and build them into short, effective sentences. Paragraphs must be developed by the writer around the central thoughts, leaving nothing to be imagined by the reader. The importance of word relationship and idea sequence is crucial.

Remember, a report is written to express an idea, not to impress a superior.

STUDENT LEARNING ACTIVITIES

- Write a report explaining a career choice.
- View the six filmstrips, *Constructing Reports*, and evaluate the information they contain.
- Complete the matching vocabulary exercise prepared by the teacher for the occupation group selected by the student.
- Demonstrate a knowledge of the active and passive verbs in report writing by changing a report prepared by the teacher from the passive voice to the active.
- List three words having unfavorable connotations and explain how they could be particularly embarrassing to the writer.
- Identify the type of paragraph development used in each of the paragraphs which the teacher has prepared.
- Keep a notebook for discussion notes and class handouts.
- Take a diagnostic test, and complete remedial lessons, if needed, on punctuation and capitalization.
- Complete a dictionary assignment.

- Prepare reports describing the events in a simulated classroom interruption.
- Prepare a group report on the students' attendance in class, citing the percentage of absentees each day. Compare Monday to Tuesday, etc., and list the frequency of reasons for the absences.
- Evaluate the reports prepared by the class members in the above two activities.

TEACHER MANAGEMENT ACTIVITIES

- Prepare a bulletin board display illustrating the components of a good report.
- Review the materials in the local audiovisual library to locate teaching aids that are readily available.
- Make arrangements for showing the movie, *Writing a Good Paragraph*.
- Make arrangements to show the filmstrips in the series: *Constructing Reports*. (6 filmstrips)
- Prepare discussion notes on the types of reports, and the importance and purpose of each type.
- Collect examples of reports from the eight job families in the Public Service Occupation area.
- Prepare a vocabulary list of technical and professional words from each of the public-service entry-level job families.
- Prepare matching exercises for the vocabulary words and their definitions for each of the major job groups.
- Prepare overlays for use with an overhead projector illustrating good and bad reports.
- Prepare a list of sentences containing passive-voice verbs which the students are to change to active verbs.
- Prepare a discussion of word meanings and emphasize the importance of connotation.
- Obtain or write, and present, paragraphs illustrating the seven ways of developing a paragraph.
- Plan simulated situations from which the students will have to prepare reports.
- Prepare a handout for students containing suggestions for the use of numbers in reports.
- Prepare discussion notes for the use of abbreviations in reports.
- Prepare a diagnostic quiz on punctuation marks and capitalization.

- Discuss and test the use of the dictionary in the classroom.

- Prepare a student handout on the eight rules for dividing words at the end of a line.

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Unit 4

BASIC RECORD KEEPING

Here are the contents of Unit 4 of the Common Core group. We suggest a careful reading of it before you read the text.

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Unit 4

BASIC RECORD KEEPING

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the characteristics of an effective record keeping system.
2. Ability to explain the need for accurate, carefully maintained records in governmental agencies.
3. Ability to identify the types of records that a governmental agency would maintain.
4. Ability to develop a basic competence in alphabetical filing as well as an understanding of the variations in alphabetical filing rules and methods utilized in governmental agencies.
5. Ability to recognize and utilize the various systems of filing in addition to (or in conjunction with) the alphabetical system.
6. Ability to develop skill in finding information in office files, reference materials, and agency manuals.
7. Ability to develop a system of keeping track of the materials that have been removed from the files for study, microfilming, or updating.
8. Ability to describe the advantages of using microfilm for keeping records.
9. Ability to analyze and determine the proper use of automated record keeping systems, such as the computer.

CONTENT

INTRODUCTION

From the birth certificate to the death certificate, everyone's

life is governed by records. The birth certificate verifies the individual's age, and will determine when he will enter public school, assume adult responsibilities and privileges, and be eligible to collect Social Security retirement benefits. School records will usually have direct bearing upon the individual's occupation. Federal and state income tax records will be established on the individual, as well as a record of marriage licenses, car licenses, driver's licenses. This list of records ends with a death certificate which will enable the deceased's heirs to obtain his life insurance.

Public-service agencies, like individuals, are governed to a large extent by records of various sorts. Almost everyone who works in the field of public service will come in contact with different kinds of records and materials. Even the new employee may actually be involved in record keeping activities, or he may need to know about where different public records are kept, or how to find the necessary materials to assist in record keeping.

There is one basic reason for keeping or filing any records of valuable material: so that they may be found quickly when needed. In addition, there are basically two reasons for wanting to find materials: to verify or prove past actions or events, and to obtain information needed for planning future activities.

Materials to be filed in many public-service agencies may include letters, reports of many kinds (technical, financial, client interactions, marketing analyses), memorandums, copies of communications, contracts and other legal documents, price lists, clippings from newspapers and other published materials, telegrams, checks, statements, receipts, bills, and other financial records.

One of the most important aspects of record keeping is the need for legibility. Records that cannot be read are of little value to anyone. Even though the intent of the author may be clear to himself, records are usually meant to be read by others as well. Often the author is not available for an on-the-spot interpretation. The importance of clear wording, good grammar, correct sentence structure, spelling, and proper paragraph structure cannot be overstated. For example, it is imperative that public-service financial records be kept accurately, clearly, and also legibly, since they are subject to audit at any time.

FILING SYSTEMS

Departmental Variances in Filing Needs. Governmental agencies have different departments, each with its various divisions,

and often, separate filing systems. For example the agency's personnel department might have its own filing system, divided into such unique categories as:

- Assignments
- Recruitment
- Training
- Classification
- Separation

Other departments, sections, or divisions would very probably also have filing systems unique to their own needs.

Basic Considerations of Systems. Thus, an effective record keeping system is organized with the programs and functions of the agency kept in mind. The filing system should be as simple as possible, and with accessibility to all clerical workers and members of the professional staff who must use it. A procedure for the periodical removal and disposal or storage of inactive records should be established. One person should be assigned responsibility for the maintainance of the files, with several individuals familiar enough to provide service during emergencies or vacation periods.

Another consideration in establishing a filing system is the security of the storage area from fire and vandalism. For example, school records and draft records have been frequent targets of vandals in recent years.

Filing Procedures. The first step in filing is to separate the materials to be filed (such as applications or program cards) from other office materials, inspect them for completeness, and to then determine which type of filing fits the need of that particular project. Some agencies follow a policy of having the responsible party initial the papers, with notes (such as dates) on action completed, and indicating that they are ready for filing. If this is the procedure, filing clerks should first check for the required initials, then read or skim the contents, to assist him when he is later asked to recall important papers. The next step would be to index the material, by mentally classifying it for its method and place of filing.

The papers are then sorted. A device called an *alphabetizer* is normally used for this job. A sorter is a flat device that has a set of open pockets each overlapping the next. They help to keep the materials organized.

Manila folders are usually used to protect the papers. It is possible to obtain manila folders in various sizes, but the most common are letter size (8½ by 11 inches) and legal size (8½ by 13 inches). After the material has been filed into the cabinet, it is ready for future use.

Each file drawer should have sufficient guides or tabs to lead the eye to the desired section of the file quickly. The guide or tab may be:

- made of the material of the folder,
- made of celluloid or other plastic,
- made of metal with a plastic window.

An angular tab slants back so that a worker does not have to bend over to read captions in lower drawers.

Filing Methods. While much of the detail of modern record keeping is accomplished by the *memory banks* of computers, there still exists a need for the traditional method of filing certain papers in office files.

Filing Alphabetically. Since this is the case, it is important that all office employees should know at least the basic rules of *alphabetical filing.* Some of the most commonly used filing rules are listed below. With an understanding of these rules, the beginning public-service worker should be able to maintain at least a semblance of order in a filing system:

- File papers by the last name (surname).

  Example: Adams before Smith

- When the last names of two or more persons begin with the same first letter, look at the second letter in the names as your aid for selecting the name to be filed in front of the other. If the second letter is the same, then look at the third, and so on.

  Example: Jackson before James

- File "nothing" before "something."

  Example: Johns before Johnson

- If the last names (surnames) of two or more persons are the same, compare the first letters in the first names to help you decide the order of filing. If the first letters in the first names (given names) are the same, compare the second letters in the given names, and so forth.

  Example: Jones, James before Jones, John

- When a name contains a first name and a middle name or initial, consider the middle name or initial only if the surnames and the given names or initials are alike.

  Example: Peters, Anna Mae before Peters, Anna Maria

- The complete name of a person in a business name is consid-

ered in the same order as if it appeared by itself.

Example: Thomas, Robert H. Company

- Names of business firms which do not contain complete names of persons are filed according to their first words. If the first words are the same, the second words are considered, and so forth.

  Example: J & R Company before Johnson Supply Company

- There are many departments, bureaus, and offices in our Federal Government. When indexing any of these, U. S. Government comes first, followed by the department, bureau, or office.

- State, county, city, and other political subdivisions are indexed under the political subdivision, then under the principal word in the name of the department or office.

Although alphabetical filing is the primary type of filing the beginning public service worker will use, there are other methods of filing with which he should become familiar. These methods include systems for *numeric*, *subject*, and *geographic* filing:

Filing by the Numeric Method. *Numeric filing systems* are so-called because numbers are used as captions on the guide and folder tabs. Alphabetic systems are direct systems because a person can go directly to the file drawer and, by means of the name captions, file or find records. Numeric systems are indirect because, in most cases, before papers can be placed in or taken from the file drawer, the worker must refer to an alphabetic card index to find the number assigned to a name or subject.

Numeric filing systems can be used to advantage in many circumstances, such as

- where papers would group themselves around definite cases, contracts, or operations that are active for reasonably long but indefinite periods, and that require permanent and extensive cross reference;

- where a file is referred to by number rather than the name of the person involved; or

- in confidential situations where names can be concealed from those handling the files by the use of number captions.

In numeric filing, a number is assigned consecutively to each correspondent or subject that warrants an individual folder as these correspondents or subjects develop. A number once assigned is maintained until a correspondent no longer does busi-

ness with the agency or company, or a subject ceases to exist. After a specified period, the number may be reassigned. All papers pertaining to the correspondent or subject are placed in the individual folder bearing the number assigned to that correspondent or subject.

A numeric system cannot be operated without a card index that will identify the assigned numbers. Each card contains the name of a correspondent or subject and the number of the folder that has been assigned.

The Social Security system operated by the federal government is based on a numeric filing idea. Schools and colleges have long utilized student numbers, and recently began to use Social Security numbers as the student identification number. Welfare cases have numbers assigned to them and the record keeping is greatly simplified as a result of this means of control. The *Dictionary of Occupational Titles* (DOT) assigns a number to all of the occupations listed.

Filing by Subject. *Subject filing* is the arrangement of records by names of topics or things rather than by names of people, companies, or locations. Government agencies might find it more convenient to use subject files for these purposes:

- to organize records that do not refer to the name of a person or organization;
- to organize correspondence that is more likely to be called for by its subject than by the name of the correspondent;
- to group records concerning the activities or products of an organization, such as advertising, sales, typewriters, adding machines, etc., so that all the records about one activity or product can be obtained immediately from the files, or
- to group together records that would otherwise fall into very small subdivisions.

Because subject files must meet the requirements of the individual situation, it is unlikely that any two subject files will be organized exactly the same. The nature of the concern would determine the main subject headings, and then subdivisions would be added as necessary.

Filing by Dewey Decimal System. The *Dewey Decimal* method of classifying information used in libraries, and familiar to most people, is a combination of the subject, numeric, and alphabetical filing systems.

Filing by Geographic Identities. *Geographic filing* relates to papers arranged in alphabetic order, with sub-listings by location, and then by name or subject. This method has particular advantage for those agencies in which the organization of files or records depends to a large degree on where things happened, or where they are located. As an example, police-department files would probably be organized first on the basis of geographic sections of the city, and then by number, subject, or by the name of the individual concerned in the file.

The specific geographic divisions used will be determined by the filing needs of the agency involved. The primary guides would bear the names of the most important geographic divisions occurring in the operations of the department. The secondary guides would then be used for subdivisions of the main geographic units, as well as for alphabetic sections of the geographic divisions and subdivisions.

MISCELLANEOUS OFFICE RECORDS

Although the type of records and/or the kind of record keeping would vary from office to office, students should be given an introduction to some of the basic records that most office workers would be required to keep, such as petty cash or revolving cash records, budget records, purchase requisitions, purchase orders, and reports.

The book *Clerical Record Keeping*, listed under "Resources" at the conclusion of this unit, gives a good summary of petty cash records. It provides a thorough study of the various forms that need to be filled out to keep a petty cash fund, and of the affiliated records. It also explains the roles of employees and employers in connection with the records.

The same source book gives a summary of budget records and purchase records. Although designed for the budget records of an individual or a family, the same principles could be utilized in setting up and in maintaining budget records for an office situation. The purchase records go into detail regarding such things as stock record cards, purchase requisition forms, record of goods expected forms, price quotation cards, purchase orders, purchase invoices, and the purchases journal. Although these are slanted toward the needs of a business, they provide an excellent background for understanding the agency's operations outlining its procedures and forms.

The average office worker should also be proficient in knowing how to keep a current and accurate account of the funds in the budget. Various manuals or methods are available which cover very adequately this area of operations.

Many public-service workers find themselves working with pay-

roll records. They must compute the wages from the time shown on time cards, figure gross wages, figure overtime, determine deductions for social security and income tax, and as a result, net pay. The cumulative employee wage records must be kept current, and such forms and reports as withholding tax forms must be prepared at the end of the year.

DATA PROCESSING

Data processing frightens some people. Complicated equipment and procedures that few people can understand are the first things envisioned by the great mass of the population. In its simplest terms, however, data processing is not complicated. Data (which, as you know, is a plural type of word) means unorganized bits of knowledge; processing means to manipulate or to handle. Broadly speaking, therefore, *data processing is the systematizing of many facts into useful organized information.*

A necessary part of the data processing done by a governmental employee is the placing of facts and information into the appropriate order, and recording them in such an organized manner that they can then be readily retrievable, or found. The ability to organize and file information has no value if the ability does not also provide for a system to readily find the information, and then to put it to use.

Obtaining and Recording the Data. Every governmental agency, regardless of its size, must process data in order to provide operational information for both the internal needs of management and the external needs of the public. The information provided and the method used to obtain information will vary with the type and size of the agency. The method used will depend upon the volume of data to be processed, the time available for processing the data, and the amount of money that can be spent.

Recording on Forms. Forms are often used to assist in recording data, which facilitates the use of the data in other operations. They are used to communicate data to other individuals or departments; to expedite the storing of data; to increase speed and accuracy in classifying, sorting, and computing data; and to assist in summarizing data so that the information can be easily read. All forms used should be designed to facilitate the processing of data to meet the specific needs of the agency that is using them.

Forms are by no means the only mechanical devices used by record keepers. Those in charge of the handling of forms,

and responsible for the information contained on them, have devised and utilized literally hundreds of different methods whereby their work could be done more rapidly and more efficiently.

Mechanical Recorders. Typewriters, imprinting devices, computers, check protectors, time clocks, copying equipment, and duplicating equipment are all means of recording data by the use of mechanical equipment. Various types of adding machines (10-key, full board, etc.) and calculators (rotary, printing, key-driven, or electronic) are machines that help us to compute data more quickly and accurately. The cash register, that is used almost everywhere goods or services are traded for money, is a mechanism combining the functions of recording, computing, and retrieving essential data.

Recording for Ease of Retrieving. The more sophisticated types of data processing equipment incorporate such recording and retrieval aids as punched cards, punched tape, edge-punched cards, and magnetic tape. A brief summary of each of the above will follow.

Recording on Punched Cards. Punched-card data processing displays the following characteristics:

- Data are represented by holes punched into cards. Each hole has a meaning, and groups of holes represent words or numbers.
- The data are processed automatically be machines that can *read* the holes in the cards, and follow directions as indicated by the position of the holes.
- The results of the processing are reported in printed documents or other desired forms of output.

Punched card data processing has these definite advantages as compared to manual or mechanical data processing:

- Data can be recorded once in a card, and is then readily available to be processed automatically through machines.
- A large volume of repetitive transactions can be processed in a relatively short time with a minimum of human effort. Once the data are recorded in the punched cards, the only human effort required to process the data is to operate the machines and to carry the cards from machine to machine.
- A high degree of accuracy is assured once the data has been punched and verified. Since the data do not have to be

copied over and over again, there is no chance of error if the data have been accurately punched into the cards initially.

- Many reports can be produced quickly. The punched cards can be manipulated in many ways to prepare a great variety of reports that provide management with the information it needs to make decisions.

Even though punched card equipment is used, there will still be a need for keeping some records manually and mechanically. More than one data processing method is needed to provide the variety of informational reports required by management and the public.

Recording on Punched Tape. Punched tape, like punched cards, contains data that machines can read. However, punched tape differs from cards in two ways:

- instead of using punched card code, the common machine language is *channel code*, which is based on the *binary number* system, and
- instead of recording data in cards, the data are recorded continuously on tape.

Thus punched tape is similar to a group of punched cards joined end to end. Approximately one inch wide, and wound on reels, the tape can contain ten alphabetic and/or numeric characters per inch.

With punched tape, data are coded in the form of holes punched into vertical columns. The horizontal rows on the tape are called channels. Punched tape may have five, six, seven, or eight channels, plus a series of small holes to guide the tape through a machine. Except for the differences pointed out, it is very nearly the same as the punched card.

Recording on Edge-Punched Cards. An edge-punched card is a card that has data punched in channel code along one or both edges and/or across the ends. The card can be punched and read by some of the same equipment that processes punched tape. The data punched into the card is also printed as a "hard-copy" record directly on the card. Edge-punched cards are used in place of punched tape when frequent reference must be made to stored data.

Recording on Magnetic Tape. Although punched cards and punched tape are important methods of recording and retrieving data for certain types of automatic data processing systems, they have

serious drawbacks for computer systems. Electronic computers operate at such high speeds that data in punched cards and punched tape often cannot be read into the system fast enough to keep up with the speed of the computer. For this reason, magnetic tape has been developed as a high speed input/output medium for computer systems.

The magnetic tape used in data processing is similar to that used in ordinary tape recorders. It has a plastic base which is coated with a metallic oxide. Data are recorded on the tape in the form of invisible magnetized spots placed in vertical columns. The spots, which are called *bits*, serve the same function as the holes in punched tape. Bits in particular combinations are used as codes for letters, numbers, and special characters, just as holes in particular combinations serve as codes on punched tape. Magnetic tape, like punched tape, is arranged in channels.

The data on magnetic tape can be erased, and the tape can be reused continuously. The amount of data that can be recorded on a reel of tape depends upon the closeness of the recorded bits of data. This closeness of the recorded data is called *tape density*. In a typical system that records at a density of 200 characters per inch, a 2,400-foot reel of tape can hold the same amount of data as 25,000 eighty-column punched cards. Thus, it is apparent that magnetic tape has a very real advantage over punched cards and punched tape in storing data.

Recording by Microfilm. Automated record keeping will be widely used in the future. However, there will always be a lot of bulky papers to be sorted in inactive files. This gets to be a problem for many agencies. The best solution for this problem is to microfilm the records. It is estimated that about 98 percent of the filing space can be saved by microfilming. Approximately three thousand letters can be microfilmed on a single 100-foot roll of 16mm film.

An agency may safeguard its records when microfilming by making two rolls of film at the same time, using one film for reference and storing the second roll in a fireproof vault. Each agency would develop a cataloging system enabling the rapid locating of information that has been microfilmed.

PROCESSING THE DATA

Electronic-Data Computers. The computer offers several distinct advantages over other automatic data processing equipment. In electronic-data processing the data is processed by electronic impulses passing through electrical circuits. Since electronic impulses travel at speeds near the speed of light,

electronic-data processing is much faster than punched card and punched tape data processing, which use equipment operated by gears and moving parts.

A computer can automatically put data into storage in its *memory banks*, can hold the data there, and then can retrieve the data whenever instructed to do so, without human intervention and at electronic speed.

In a computer system, a series of repetitive operations can be performed without human intervention and at high speed. The computer does this by following a series of detailed instructions, called a *program*, which is stored in the computer itself. This stored program tells the computer what data to process, what operations to perform with the data, and what to do with the results; for example, to *store* or *print* the processed information.

Computer Possibilities and Limitations. In addition to doing clerical and accounting work, a computer can also make routine decisions; that is, it can make a choice among alternatives. It can also take alternative courses of action. The computer itself, for example, can select which part of the program to follow, an operation known as *branching*. A computer can also repeat a sequence of instructions; this is known as *looping*.

But, no matter how advanced, or how sophisticated its electronics, a computer can work only with the facts and figures that are fed into it. Obviously then, if wrong information is fed into the computer, wrong results will come out of the machine. Even though the actual computational time is short, the material must be programmed into the machine.

CONTROL SYSTEMS

Surveys of files show that from 1 to 5 percent of records are misfiled, and half of those misfiled are never found. A misfile rate of 1 percent is usually considered normal, but the goal of a government agency is always no misfiled materials. The records of an arrest, a prisoner, a student's academic record are too important to be lost and, if they should be, the undermining of public confidence in the department would severely weaken its effectiveness.

Even though the greatest possible care has been taken, a paper will occasionally be missing when needed. A few clues, therefore, for conducting systematic searches for missing data may not be inappropriate:

- Look through the folder thoroughly. The paper may have been placed out of order or may be sticking to another paper.

- Look between and under folders. Sometimes a paper is mistakenly placed between folders instead of into the proper folder, and subsequently, is pushed or slips to the bottom of the tray.
- Look under similar names or headings.
- Look for transposed names. A paper may be filed under a first or second name instead of the surname, or it may be filed under the subject's maiden name.
- Check the "out" folders or substitution cards to see who used it last.
- Look in the *To be filed*, *Pending*, *Suspense*, or *Being microfilmed* file trays or lists.
- Check for cross references or related material to see if the paper has been filed there.

If, after a thorough search, the paper is still not located, alert the other workers in your office and make a note to place in the file to prevent someone else from making an extensive search. However, in a well-organized agency, it is seldom that records are lost.

Much time may be saved by establishing and using a control system. If a control system is used, the location of every piece of information is known at all times. There are several major methods of charging out materials; such as these:

- Use of an *out guide;* a stiff guide with the word *out* written on the top. It has a pocket on the front in which may be placed a requisition slip indicating the user, date, and material taken.
- Insertion of an *out folder* in the position of the borrowed folder; this is used to store new material until the regular one is returned.
- Placing of *substitution cards* in regular folder to indicate that material has been removed.

When material has been returned to the files, the out guides, out folders, or substitution cards should be removed from the file. The notations should be crossed out to indicate that the borrower has returned the material.

SUMMARY

Record keeping is an important function of every governmental agency. How it is done will be determined to a large extent by the function of the agency, and the manner in which its records will be used. The manuals published by the agency will usually have detailed instructions covering maintaining

of records; however, the people involved need to completely know the procedures, so that time is not wasted consulting the manual everytime something is to be filed.

Anyone can stick papers into a file cabinet; however, responsibility does not end there. *The record must be available when needed.* This demands a thorough knowledge of the steps to follow in preparing materials to be filed and the various types of filing and record keeping systems.

STUDENT LEARNING ACTIVITIES

- Prepare discussion notes on the characteristics of an excellent record keeping system.
- Prepare an outline of the various types of classifying information for filing or storage.
- Prepare an outline of the rules for alphabetizing material.
- Alphabetize the set of index cards prepared by the teacher.
- Prepare an outline of the procedures for establishing or using a numerical file.
- Each student should prepare an organizational or functional chart of the department in which he wishes to work and indicate which records would need to be kept in each of the areas on the chart.
- Visit a governmental agency and prepare a class report on the record system used. Be sure to note such special problems as classifying and keeping records on fingerprints for future reference.
- View and discuss the films *Filing Procedures in Business*, *Introduction to Automatic Data Processing*, and *Data Processing: Introductory Principles*.
- View and discuss the filmstrips *Keeping Records Up to Date*, *The Opening Phase of Bookkeeping*, and *Files and Filing*.
- Study record keeping and data processing on your own by reading programmed instruction books such as *Paperwork Management* and *Presentation of Data*.

TEACHER MANAGEMENT ACTIVITIES

- Prepare a bulletin board illustration of the various types of filing.
- Obtain or prepare a set of index cards of the names of individuals, various governmental agencies, and departments which may be used to illustrate filing procedures.
- Make a study of the records kept at the local governmental agencies and prepare material for a class discussion on the why's, how's, and procedures used by the various departments.

- Make arrangements to visit a governmental office that utilizes all of the various record keeping devices, such as traditional files, microfilming, and automated devices or computers.
- Prepare a class discussion on the rules for the alphabetical filing of material.
- Obtain the budgetary forms from a governmental office and duplicate some of the simpler forms.
- Prepare some simple budgetary problems. Let the class work on them in small groups.
- Make arrangements to show the films *Filing Procedures in Business*, *Introduction to Automatic Data Processing*, and *Data Processing: Introductory Principles*. Lead a class discussion afterward.
- Prepare a class discussion on the rules for the alphabetical filing of material.
- Make arrangements with the school librarian to demonstrate cross filing for students.
- Encourage the students to study on their own by reading programmed instruction books on record keeping and data processing. Examples of programmed instruction books shown in the resource section of this unit are *Paperwork Management* and *Presentation of Data*.
- Make arrangements to show the filmstrips *Keeping Records Up to Date*, *The Opening Phase of Bookkeeping*, and *Files and Filing*.
- Arrange for a class debate on *the advantages and disadvantages of using automated record keeping systems*.
- Prepare discussion notes on what to do if some filed matter is lost.
- Prepare group activities centered around the problem of keeping inactive files.

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Unit 5

GOOD GROOMING

Here are the contents of Unit 5 of the Common Core group. We suggest a careful reading of it before you read the text.

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Unit 5

GOOD GROOMING

INSTRUCTIONAL OBJECTIVES

1. Ability to appreciate the importance of good health habits.
2. Ability to understand the importance and relationship of good grooming habits to gainful employment.
3. Ability to dress in a manner suitable for obtaining and holding a job.
4. Ability to evaluate good grooming skills in relation to successful employment in public-service occupations.
5. Ability, with good grooming, to form positive attitudes toward personal pride and self-respect.
6. Ability to demonstrate a desire to improve personal appearance.
7. Ability to realize that poor posture affects both appearance and health.
8. Ability to accept positive suggestions on appropriate dress and cleanliness.

CONTENT

INTRODUCTION

Appearance is important in applying for a job and for working successfully on the job. This is especially true in public-service occupations. One's self-image is usually related to physical appearance.

Young workers are often self-conscious and lack a feeling of security. Their concern over their appearance directly affects their poise, self-confidence, and feeling of well-being.

Neatness and grooming are important for many reasons, but most of all for the feeling of personal pride and self-respect that they give the individual. These feelings are often reflected in general appearance, and may be the cause for vocational success or failure.

RELATIONSHIP OF GROOMING AND EMPLOYMENT

The pursuit of a career is one of the most important goals during an individual's life. Good grooming is an important step in the achievement of this goal. Good grooming affects appearance and vitality. An individual will be judged by the way he appears. For greater success in life, both on and off the job, it is important that a good impression is made.

When applying for a job, as well as in dealing with the public, the first impression is important. The first, and often the most lasting, impression an employer gets of the applicant is a visual one. Care in all areas of grooming is necessary to give a total picture of being well-groomed. *The individual who works at being well-groomed will have his appearance working for him.*

Employers expect their employees to present a neat and clean appearance at all times. The people who do the hiring must keep in mind the image of the governmental agency they represent. If a person is hired, he is considered a part of that agency. If a person dresses poorly and is not groomed properly, or has poor personal habits, he will reflect poorly upon the agency. It must be remembered that governmental agencies view their employees in terms of public relations. A poor representative of the agency or department can mean a loss of time and efficiency. In order to keep a job, a good appearance must be maintained, especially when serving the public.

In the employment interview, it does not matter what other qualities and abilities the person possesses; if the applicant does not measure up to the appearance standards set by the employer, he will be given no further consideration. Employment personnel point out that many people seeking a position lose out on this point alone - appearance. In the case of a public-service worker, this can be especially important. The agency managers realize that their workers will be dealing with the public, and that appearance will be a key to success of the agency as well as the employee. This is one of the major reasons for the personal interview required before employment in almost all public-service occupational fields. The moments which are spent in the employment interview are very important. The applicant has been given only a short time in which to sell himself and his services to the employer (sometimes represented by several people). No matter how im-

pressive his letters or application, the physical appearance and the words used will either get the applicant a job or will bring defeat to his purpose. (See INTERVIEWING SKILLS, Unit 7.)

RELATIONSHIP OF GOOD GROOMING AND GOOD HABITS

Good grooming, which is reflected in appearance, is dependent upon good habits. The employee who has developed good grooming habits may find that they make the difference when job advancement is being considered. Employers may use personal appearance as a sample of the kind of work that is done by an employee. In most cases a person who keeps himself clean and neat is the kind of person who will take his time to do a job well.

Self-concept

Self-concept is defined as the way an individual sees himself. The self-concept develops in response to the reactions of others, which in turn are a direct response to the individual's self-concept. The self-concept reflects how an individual feels about himself. Like any feeling, it may be partially unconscious, or based upon unconscious needs. The more realistic the self-concept, the better an individual will be able to control his personal relationships. A realistic self-concept may be developed by making an objective self-evaluation during which habits, attitudes, goals, interests, and aptitudes are analyzed.

Honesty in Self-Concept. Others may not see an individual as he sees himself; therefore, he should strive to relate his positive self-concept to them. By being honest when looking at himself, an individual may see things that he will want to change. When he does make changes in his self-concept by changing his appearance to others, he will build a healthy self-concept and a feeling of adequacy.

Each person is a special individual with his or her own unique qualities. Making the most of one's own special qualities is a key to success and happiness. An acceptance of the responsibility for one's health and appearance is mandatory. Care of one's skin and complexion, hair, teeth, breath, and posture is essential to a healthy self-concept.

A successful employee must evaluate himself and his own special qualities, emphasizing his assets. He should determine to make the most of his own special qualities and to minimize his liabilities. There are certain personal characteristics which are unchangeable, such as height, build, color and tone

of skin, texture of hair, and features - deepset eyes, big ears, large nose, dimples. However, looks may be changed by determining the best features, and utilizing the appropriate aids to make the most of these features. Each individual should set up his own self-improvement course in order to present a clean, neat appearance.

Positive Attitude Required in Self-Concept. Teachers may help students to change poor attitudes by encouraging them to adopt positive outlooks. A person must determine to make the most of every situation. Each experience can be as exciting and rewarding, or as dull or boring as a person makes it. Personality can also be improved by exercising enthusiasm. Students can be encouraged to give a little more of themselves by being the first to smile, to speak, or to offer to do a job.

People who will be working in public-service occupations cannot know what problems they might face in the future, and to prepare to meet these problems, they need to develop a greater understanding of themselves and a feeling of adequacy. They must attempt to discover their own interests, strengths, and abilities, and begin to understand how these traits are related to establishing personal and vocational goals. *Through self-understanding, the workers will develop a sense of personal growth and worth.* This sense of personal worth will usually manifest itself in a neat appearance.

Good Habits of Health

Good health is the result of cleanliness, proper nutrition, care of the body, and careful grooming. Physical changes of adolescence (the period of several years between puberty and early adulthood) are natural, and this calls for accepting responsibility for the care of one's health and appearance. It is a period of especially rapid growth, in which there are varying rates of change for different individuals. During this period of rapid change, glandular activities produce a rapid growth spurt, sexual maturation, emotional changes, and changes in eating and other living habits.

Good health habits are important during this period of physical and emotional change. Here is a list of good habits, with indication of their importance:

- *Proper Diet* - The right kinds of foods contribute to energy and to healthy blood; helps to build muscles and bones; and to provide vitamins which protect against disease.
- *Proper Rest* - The human body needs an adequate amount of sleep, although the amount depends on the individual - eight hours is the general average for the adolescent.

- *Exercise* - Exercise helps keep the body in good condition; aids blood circulation, breathing, digestion, and metabolism.
- *Proper Elimination* - This rids body of waste and harmful substances.
- *Drinking Enough Water* - Water aids in the digestion and absorption of foods, the carrying of foods to the body tissues, and the removal of body wastes; it also plays a basic part in regulating body temperature.
- *Cleanliness* - Dirt is the breeding place of disease and germs.

Good health habits go hand-in-hand with good grooming habits; both of these are essential for attractiveness. Good health habits affect overall general health and tend to improve the mental outlook and capacity for work. The result is energy and enthusiasm for greater job efficiency with less absenteeism.

Good Habits of Cleanliness

Cleanliness is important for social success as well as for health; cleanliness is imperative in order to make a good first impression as well as a lasting impression. Teachers realize that cleanliness may require a habit change; therefore, more than lecturing will be required.

The acquiring of a job may be the motivating factor required for the adoption of habits involving cleanliness as an indication of the quality of work to be produced by an employee. Students must be made to realize that cleanliness will be a large factor upon which their success in public service may depend.

Personal Grooming. Many students simply do not practice habits of cleanliness because they are unaware of how to achieve good personal grooming. Others do not have the facilities for keeping clean, and there are some who do not care. A teacher must give consideration to these facts when developing a grooming program for students.

General cleanliness can be achieved through a routine of regular bathing, care of skin and complexion, care of the teeth and breath, and for boys, may require daily shaving.

It is desirable, under normal conditions, to bathe regularly. It not only cleanses the body, but also serves several other functions. Bathing or showering acts as a tension release, body stimulant, or body regulator. The activity of the sweat glands, together with the bacteria present on the skin, produces perspiration wetness and subsequent odor. The offensive

odor of bacteria may be controlled by using an underarm deodorant or antiperspirant. Antibacterial soaps also help combat this perspiration odor.

Care of Skin and Nails. Changes in the oil glands located on the face during the adolescent period of growth produce excess oils which contribute to the formation of acne. The face requires special washing so skin problems may be minimized. There are many excellent types of soap or lotion available for care of skin and complexion; the wise person will make himself aware of those available to him.

Nail care is often neglected by the adolescent; this, too, should be included as part of one's program for the achievement of personal cleanliness.

Care of the Mouth and Teeth. Clean teeth and fresh breath are important to an individual, both physically and socially. The variety of nourishing foods which promote general good health, also help in developing and maintaining healthy teeth. Teeth should be brushed in the morning, evening, and as soon as possible after eating. If brushing isn't possible, a food which has a detergent or cleaning action should be eaten, or water can be swished in the mouth. This is essential for the prevention of tooth decay and bad breath.

Toothpastes aid the toothbrush in cleaning food debris from the teeth and areas between the teeth. Dental floss is also helpful in removing small food particles. Toothpaste removes unsightly film, called *plac*, which tends to accumulate on the teeth and aids in the dislodging and destroying of odor-causing and decay-causing bacteria. The brushing of teeth should be done in the proper manner, as indicated by your dentist or school nurse, for greater efficiency. Attractive teeth and healthy gums are very important to one's overall health, grooming, and personal appearance; however, to have attractive teeth, a regular program of dental care should be followed in order to maintain this attractiveness.

Because cleanliness is a personal matter, chances are that one who is offensive will not be told such by others. This person may simply be avoided or talked about without his knowing. In either case, noticeable uncleanliness may jeopardize not only his personal reputation, but also his employment.

Good Habits of Hair Care. The grooming of hair can be a tremendous contribution to the overall appearance of an individual, particularly if the hair is:

- clean and lustrous,
- free from dandruff,
- becoming in style,
- neatly combed.

Care of the Hair. Care of hair should include a good haircut. Brushing is good for males as well as females. It distributes the natural oils and, like exercise, it stimulates circulation. Massaging maintains good circulation through the scalp tissues and about the hair roots.

Unclean hair has a noticeable odor; therefore, it should be shampooed as needed for cleanliness, but frequency of shampooing depends on the individual's hair and the hair style. Hair needs should be determined and a choice of shampoo should reflect these needs. A practice should be made of cleaning brushes and combs when hair is shampooed.

Many of these hair problems, which apply to both men and women can, and should, be dealt with, and controlled, to the extent possible, for best appearance and health:

- Dry hair
- Split and dry ends
- Oily hair
- Fine, limp hair
- Very thick hair
- Slow growing hair
- Thin hair
- Falling hair
- "Yellowed" or grey hair
- Dandruff

Hair Styling. Hair styles will depend not only on what is fashionable, but also on what is becoming to the individual. The proper choice of a style can be an asset to personal appearance. Hair styles are most becoming when the shape of the face,

- oval,
- round,
- square,
- long,
- heart-shaped,

is considered, for proper balance and proportion.

Each face shape is enhanced when a hair style which is most flattering to that shape is worn. Styling aids, such as permanents and hair sprays, can be used to aid in the achievement of good grooming.

Extreme styles for girls and length for boys are usually unacceptable by public-service or other employers. Excessive hair arrangements should, therefore, be avoided. Students must be aware of their own appearance and how their hair will "tell" something about them. Employees in public-service oc-

cupations must be conscious of the visual cues they give about themselves.

Good Habits of Posture

Posture is the foundation of one's appearance, and has a definite influence on the impression he makes. Poor posture is unbecoming and unhealthy; good posture helps to develop poise and improves body functioning. Well-fitted clothing and shoes help to maintain posture through body balance.

The outline, following, indicates the basis for good standing and sitting posture. These general "guidelines" would be of assistance in acquiring a healthy and attractive posture.

Good sitting posture is achieved by these habits:

- Sit back so that hips touch back of chair.
- Keep feet flat on floor.
- Sit tall.
- Keep chest out, with neck and head in line with upper back.
- When writing, lean forward from the hips, maintaining the correct alignment of the back, neck and head.

Good standing posture is attained through consistent attention to these details:

- Keep feet parallel and slightly apart, with toes pointed straight ahead.
- Stand with knees easy, not bent or forced back.
- Hold abdomen in by contraction of abdominal muscles.
- Keep back as flat as possible.
- Stand with hips firm and tucked under body.
- Keep shoulders relaxed and down, shoulder blades pressing slightly together.,
- Be proud, stand with head high, chin slightly in, and back of neck pushed slightly backward.
- Keep weight evenly distributed on each foot, and most of the body weight on the balls of your feet.

Posture will affect a person's appearance, the way he feels, his health, and his job efficiency. It may be accepted by an employer as an overt demonstration of an employee's willingness to work.

RELATIONSHIP OF DRESS AND SUCCESS

Clothing is a means of communication. The first visual impression of a person is based almost 90 percent on the appearance of his clothing. Students, employees, and all others need to develop an awareness of the necessity for neat, clean, and well-fitted clothing for job success. Some individuals lack the ability to choose styles which are appropriate for their jobs.

Trends in color and style have changed drastically and will continue to change; therefore, there exists a need to help people develop good taste in dress. The public-service employee must have, and put to practice, a knowledge of pleasing color combinations and appropriate styles. While the relationship between clothing management and appearance is obvious, many workers fail to realize the impact that it has upon job efficiency. Inappropriate dress may be an office distraction, or may even prevent getting the job in the beginning.

Common Sense in Clothing Selection

Common sense is the major factor in deciding what clothing is appropriate for the job interview, as well as the job itself. In order not to detract from one's self, conservative and tasteful clothing should be chosen. The type of clothing which will be worn on the job should also be worn for the interview, except when a uniform or special protective clothing is required. Outer winter garments should not be worn in the presence of the interviewer.

Personal comfort must also be considered when choosing clothing. It is wise for a person to dress in a manner which allows him to forget his clothing so that attention can be given to more important matters.

Students should learn what is suitable to wear for every occasion; clothes worn to a party or to school may be conspicuous when worn on the job. A large wardrobe does not insure that a person is well-groomed; the choice of what is worn is the determining factor.

Criteria for Wardrobe Selection

Attention to the following data (given in outline form) may be useful in acquiring the ability to choose appropriate dress:

Remember elements in design:

- Color
- Texture
- Line
- Shape

These elements should be harmonious or mutually complementary.

Remember principles in design:

- Unity
- Dominance
- Proportion
- Balance
- Contrast
- Rhythm

These principles largely determine the appropriateness of a particular style of dress.

Pay attention to lines:

- Vertical
- Horizontal
- Curved
- Diagonal

The type of lines selected as basic to clothing styles should be proportionate to the other elements of design and the shape of the individual's figure.

Consider figure features:

Pay attention to problems of different figure types, and coordinate features with the elements and principles of good design.

People come in different sizes and shapes. These differences should be considered, and used to the individual's advantage in selection of a wardrobe.

Care of Clothing

Clothes should be kept clean and well-pressed. It is of little importance whether clothes are new or old; however, it makes considerable difference if they are unclean. It is not necessary nor required that a great deal of money be spent on clothing; but inexpensive neatness can mean the difference between getting and keeping a job, or losing it.

Under special conditions of working, the employer may give a clothing allowance to the employee for purchase of clothing for use on the job, and some employers may reimburse the employee for clothing purchased for special use. Many jobs require uniforms, and some employers will furnish and launder them. When a uniform is to be worn, care must be taken to insure that it is clean and pressed, and that all the accessories are in order. It is important to always have an extra uniform ready if something should happen to the one being worn.

Appropriate Dress Helps on the Job

The standards set by the particular public-service agency should be a guide when considering clothing and accessories. For example, agencies may have regulations against wearing of mini-skirts in the office. Necklaces, rings, bracelets, may present a hazard on the job in that they could get caught in the equipment.

Good clothing management can have an effect on job success in its ability to promote promptness and neatness on the job. The prearranging of clothing can save time.

A person who is dressed appropriately will fit well into the working situation and will have a personal feeling of well-being which will be reflected in his successful employment.

SUMMATION

Acquiring and keeping a job, whether in public-service or some other occupation, is one of the most important goals of any individual. How he sees himself, that is, his self-concept, influences how he looks and how others see him. In applying for a job, a person has only a few minutes to present himself. In those few minutes, the employer forms an impression. For greater success in life, it is important that a good impression be made. Good grooming affects appearance and vitality and will help to make that good impression.

In order to be a well-groomed individual, one must practice good health habits, such as proper diet, rest, and exercise, drinking sufficient water, elimination of body waste, and cleanliness. Cleanliness is a basis for good grooming. It is desirable to bathe as regularly as possible, and give special care to complexion, nails, teeth, and hair. Hair should be properly cut and extreme styles should be avoided.

Whether on the job or looking for a job, an individual should wear clean, neat, well-fitted clothes. They should be comfortable so that he does not have to be concerned about how he looks or feels and is free to think about more important things. It is also important that an employee comply with the standards set by the agency for which he works in the matter of dress. In addition, the foundation of a person's appearance is his posture. Good posture helps to develop poise and has influence on the impression one makes.

STUDENT LEARNING ACTIVITIES

- View pictures of job applicants and select the ones that you would hire for positions of: social worker, teacher's assistant, recreational aide, secretary, employment counselor, forestry aide, fireman. Discuss the reason for each selection.
- Discuss personal experiences related to poor grooming and wrong first impressions.
- Prepare checklists for phases of grooming.
- Set up a self-improvement program which focuses on a trait for improvement in grooming.

- After viewing the filmstrip, *Grooming for Boys and Girls*, list "habits now" and "habits to improve." Write out a plan on how to improve grooming habits.
- View the film *A Time and a Place* and write comments on how appearance affects behavior for discussion after the film.
- Submit questions on good grooming skills for class discussion.
- Participate in a student panel moderated by the school nurse or physician on health habits for teenagers.
- Discuss effects of rest, relaxation, and hygiene on job efficiency.
- Discuss in small groups the effect of proper and improper diet on health, the way we look, the way we feel, the way we act.
- Discuss, "How it feels to work or sit near someone who isn't clean."
- Role-play a situation in which long hair would make a difference, as for instance, getting or not getting a job.
- Bring in pictures of attractive hair styles for display.
- Discuss the effect of posture on a person's appearance and the way he feels, and on his health and job efficiency.
- List various types of job families in public service and the particular type of grooming practices required for each.
- View pictures of employees on various jobs, and discuss types or appearance of clothing worn.
- Listen to your local school principal or a personnel officer from a local public-service agency speak on what is expected of a prospective employee.
- Write an essay on the following sentence: "A first-class appearance is a letter of introduction you can write for yourself."

TEACHER MANAGEMENT ACTIVITIES

- Prepare for discussion, a series of pictures of job applicants, demonstrating such various personal appearances as:

  Man with three days' growth of beard,
  Man with open collar and tie hanging loose,
  Lady in business suit; in formal wear,
  Man with long hair and sport shirt,
  Man in neat, clean clothes, shaven,
  Girl in a mini-skirt or bare midriff,
  Girl in pants suit or simple dress,
  Boy in faded blue jeans and sweatshirt,
  Boy in sport shirt and casual pants.

- Encourage students to discuss personal experiences related to poor grooming and wrong first impressions.
- Set up a checklist for all phases of grooming.
- Organize the showing of the filmstrip *Grooming for Boys and Girls* and discuss the improvement of grooming habits.
- Supervise the setting up of programs which focus on traits for self-improvement.
- Arrange to have the school nurse or physician moderate a student panel on health habits for teenagers.
- Lead a discussion on how rest, relaxation, and hygiene affect job efficiency.
- Lead a discussion on the effect of proper and improper diet on health, appearance, and actions.
- Invite a beautician and a barber to speak on the proper care of skin, hair, and nails.
- Organize the class into groups to debate such subjects as: "Whether or not a person is clean is his or her own business," "How a student can improve his personal grooming," etc.
- Lead discussions on various topics, such as, "What do we communicate through clothing?" "How does posture affect health and job efficiency?" "How does it feel to sit or work next to someone who isn't clean?"
- Have students role-play a situation in which long hair made a difference; for instance, in obtaining a public-service job.
- Have students list types of jobs familiar in public-service and the particular grooming practices required.
- Arrange for the showing of films, for example, *Dressing Up, Health Habits, I Want a Job* and discuss the key points.
- Have students view pictures of employees on various jobs and discuss types and appearance of clothing worn.
- Invite the principal or a public-service agency personnel officer to speak on what is expected of a prospective employee.
- Have the students write an essay on what the following sentence means to them: "A first-class appearance is a letter of introduction you can write for yourself."

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Unit 6

RELATIONSHIPS WITH OTHER PEOPLE

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Unit 6

RELATIONSHIPS WITH OTHER PEOPLE

INSTRUCTIONAL OBJECTIVES

1. Ability to distinguish between formal and informal behavior.
2. Ability to identify the important factors in communicating with people.
3. Ability to understand how defense mechanisms affect communication with others.
4. Ability to identify the roles played in effective person-to-person communication.
5. Ability to acquire the human relations skills needed for getting along with others both on and off the job.
6. Ability to establish greater personal effectiveness with others so as to develop better cooperation and superior-subordinate relationships in public-service working situations.
7. Ability to recognize the mutual dependence of individuals on each other.
8. Ability to form positive attitudes toward the worth and dignity of every human being.
9. Ability to become aware of how feelings affect one's own behavior, as well as one's relationships with other people.
10. Ability to use an understanding of human relationships to effectively work with people.
11. Ability to improve communications with others by developing greater effectiveness in dealing with people in the world of public service.

CONTENT

INTRODUCTION

Perhaps the single most important skill that a public-service worker, or anyone for that matter, needs, is the ability to get along with other people. "Person-to-person" relationships are the building blocks of all social interactions between two individuals. If there is one essential ingredient for success in life, both on and off the job, it is developing greater effectiveness in dealing with people.

The skill of the teacher is critical to the success of this unit. He should establish a permissive and non-threatening group climate in which free communication and behavior can take place. The importance of this unit cannot be over stated. The overall objective is to establish greater personal effectiveness with others and to develop better co-operative and superior-subordinate relationships in the public-service occupations. Obtaining greater "self-awareness" is a large part of this goal. Because interpersonal relations are affected by a variety of factors, some attention should be given initially to basic rules of conduct and behavior on the job.

INTERPERSONAL CONDUCT AND BEHAVIOR ON THE JOB

Most public-service agencies have clearly defined rules and regulations. The behavior of the public-service worker is often guided by the established procedures and directives of that individual agency. In many cases, even individual departments or units will have procedures manuals, which regulate conduct and office work.

Formal Organization of the Office

At one point or another, most public-service employees either work directly in an office, or come in frequent contact with other people working in an administrative or staff office. Students should become familiar with the organizational structure of the occupational groups in which they are planning on working. A park worker, for example, must know about the organization of the Parks Department--what kinds of staff or administrative services are provided, what about training, what are the safety rules, what goes into personnel records, etc. Preparing a flow chart of the relationships between different positions in a particular agency is one way of learning about the organization of that office or agency.

Office as a Setting for Formal and Informal Relations

It is necessary to become aware of the different kinds of social relations shared with co-workers and the public. Some co-workers, for example, are seen only at work, and others are seen socially after work and/or on weekends. Factors that determine which co-workers become *personal* friends and which are just *work* friends should be considered and discussed.

On the other hand, a public-service worker usually has more formal relationships with the public with whom he comes into contact. Consider the relationships of the preschool teacher's aide and his students, the library helper and his library patrons, the police cadet and the general public, etc. In each of these cases, the public expects the public-service worker to help them with a particular service.

Although the distinction between formal and informal social relationships is not always clear, one should be sensitive to the fact that both kinds of relationships affect the behavior of the public and the public-service employee. Normally, the very organization of the public-service office helps to create a social climate for developing working relationships of a formal nature, and personal relationships with co-workers and the public which are of a more impersonal nature.

Office Behavior

Specific kinds of behavior relate to these formal and informal relationships with other people. Typically, the formal relationship is well prescribed and regulated by procedures or directives. The license interviewer, as an example, has specific questions to ask, and specific information to obtain from the applicant. Their relationship can be described as formal or prescribed by regulation. On the other hand, other office behavior can best be described as informal and non-prescribed (or *free*). Interpersonal relations in this case are often more personal and relaxed by their very nature.

INTERPERSONAL COMMUNICATION - THE MEANING

Interpersonal communication can be defined as a two-way flow of information from person-to-person. One cannot study human relations without examining the constant relationships that man has with other people; the individual does not exist in a vacuum. Most of man's psychological and social needs are met through dealings with other people. In fact, one psychiatrist (Harry Stark Sullivan) has developed a theory of personality based upon interpersonal situations. This viewpoint, known as the *Interpersonal Theory of Psychiatry*,

claims that personality is essentially the enduring pattern of continued interpersonal relationships between people. This interpersonal behavior is all that can be observed as *personality*.

Importance of Face-to-Face Contacts

The very phrase, *Public Service Occupations*, suggests frequent face-to-face contacts with not only the general public, but with co-workers as well. With possibly a few exceptions, practically every public-service employee encounters frequent person-to-person contacts both on and off the job. The ability to get along with people is a very important part of public-service work.

Listening Techniques

Effective listening is a critical part of interpersonal communications. Listening is an active process, requiring not only that one must *pay attention* to what is being said, but that one must also *listen* for the meaning of what is being said. Almost one-half of the total time spent communicating, (reading, writing, speaking, or listening) is spent in listening.

Even though people get considerable practice at listening, they don't do too well at it. Many studies have shown that, on the average, a person retains only about 25 percent of a given speech after only 10 minutes have elapsed. Most people forget three quarters of what they hear in a relatively short period of time. Clearly, people need to improve their listening skills if they are to become more effective in their relations with other people.

FACTORS IN INTERPERSONAL COMMUNICATION

There are a number of components that affect the person-to-person relationship. Some of the factors common to both the sender and the receiver in a person-to-person communication are:

The Attitudes and Emotions of the Individuals

For example - two people are shouting and screaming at each other - how effective is their interpersonal communication?

- *The Needs and Wants of the People Communicating*

  Both the sender and receiver have unique desires, some open, and some hidden from the other person. These needs

can and do strongly influence interpersonal relationships.

- *The Implied Demands of the Sender and Receiver*

  An important factor in interpersonal communications involves requests or demands. How are these demands handled? What are some typical responses to demands? These factors are common to both the sender and the receiver in interpersonal relations and affect the individual behavior of the people communicating.

The Choice of Words of the Conversant

One's choice of words can have a direct bearing on the interpersonal communication. The vocabulary one uses in interpersonal relationships should be appropriate for the occasion. For example, a preschool teacher's aide would not use the same vocabulary in talking to a three-year old, as she would in talking to the preschool teacher.

How Each Sees the Other

The process of communicating from person-to-person is greatly influenced by the perception that the sender and receiver have of each other. The feelings that a person has toward the other person are reflected in his tone of voice, choice of words, and even in his *body language*. A reference book mentioned in the resource section of this unit, *How to Read a Person Like a Book*, deals with the importance of body language in person-to-person relationships.

The Right Time and Place

Another factor that may be important in interpersonal relationships is the timing of the communication. For example, one of the first things a supervisor should do if he wants to talk over a problem with his subordinate, is ask the question: "Is this the right time and place?" Problems should not generally be discussed in the middle of an office, where other employees, or the public, can hear the discussion. Personal problems should be discussed only in private.

The Effect of Past Experience

In general, the quality of the person-to-person transaction will depend upon the past experience of the individuals. Human beings have acquired most of their opinions, assumptions, and value judgments through their relationships with other people. Past experience not only helps to teach people about

effective interpersonal relationships, it is also often responsible for the irrational prejudices that a person displays. A strong bias usually blocks the interpersonal relationship if the subject of the communication concerns that particular bias.

The Effect of Personal Differences

An additional factor in interpersonal communications involves the intelligence and other personal differences of the people communicating. An example of such a personal difference is the *objectivity* of the people involved, as compared with their *subjectivity*. One person may try to be very fair and objective in discussing a point with another person, yet this other person is, at the same time, taking everything personally and being very subjective in his viewpoint. It is almost as if an adult was talking to an angry child.

Such differences can impede the communications flow between two people. In fact, all the factors mentioned in communications should be examined as to whether they block or facilitate interpersonal relationships. *The most effective interpersonal relationships are those that are adult-like in their character.*

DEFENSE MECHANISMS IN INTERPERSONAL RELATIONS

Defense mechanisms are attempts to defend the individual from anxiety. They are essentially a reaction to frustration - a self-deception.

Causes for Defense Mechanisms

In order to help understand some of the causes for defense mechanisms, remember the basic human needs:

- *Biological or physiological needs* - hunger, water, rest, etc.
- *Psychological or social needs* - status, security, affection, justice etc.

Fear of failure in any of these basic needs appears to be related to the development of defense mechanisms; attitudes toward failure, in turn, originate out of the fabric of childhood experience. The social and cultural conditions encountered during childhood determine the rewards and controls which fill one's later life. These childhood experiences, and their resultant consequences, affect personality

development, the individual's value system, and his definition of acceptable goals.

Individuals who are dominated by the fear of failure may react by using one of these defense mechanisms:

- *Rationalization* - making an impulsive action seem logical.
- *Projection* - assigning one's traits to others.
- *Identification* - assuming someone else's favorite qualities are their own.

Results of Use of Defense Mechanisms

A common factor to all defense mechanisms is their quality of *self-deception*. People cling to their impulses and actions, perhaps disguising them so that they become socially acceptable. Their defense mechanisms can be found in the everyday behavior of most normal people and, of course, have *direct influences* on interpersonal relationships.

A person, for example, who is responsible for a particular job makes a mistake, and the work doesn't get done. When confronted with the problem by his supervisor, the individual puts the blame on someone or something else. This is a very common form of a defense mechanism.

Defense mechanisms can sometimes have *negative influences* on interpersonal communications. They can contribute to the individual forming erroneous opinions about the other person's motives. These mechanisms can alter the perceptions and evaluations made about the individual by other people. Ways to understand these mechanisms must be sought; one solution is to become more aware of the common defense mechanisms, and to become less defensive through greater acceptance of others.

THE INFLUENCES OF ROLE-PLAYING IN INTERPERSONAL RELATIONS

Everyone wears a mask and plays a certain role or roles in life. Even if the role one plays is to be himself, that particular form of behavior can still be considered a role. As a public-service employee, one's role is to serve the public. This can be done in a number of ways. Some of the factors involved in public-service roles will be mentioned below:

Exploring Superior-Subordinate Relations

Public-service employees are accountable for their actions.

From the entry-level public administrative analysis trainee, to the President of the United States, every public servant must be accountable to either an immediate supervisor, a governing body, or to the public itself. Entry-level public-service employees gain experience and get promoted, but they continue to be subordinates and responsible for their actions, even though they also become supervisors and have people working for them.

Simulation exercises can be developed which will examine the perceptions of the superior by the subordinate. *Authority* and *power* factors may enter in here, as the superior also perceives the subordinate in a particular way. *Dominance* and *need* factors are at work in superior-subordinate relationships, and the style of leadership used (*autocratic, democratic,* or *lassiez-faire*) is a form of leadership role.

Peer relationships can be explored through simulation exercises. The ways in which co-workers perceive each other and the resultant effect on cooperation is one area to be examined. Ways to establish a climate or environment for effective, cooperative relations should be sought.

It is desirable also to simulate, for better comprehension, interpersonal communications with the general public. Role-playing techniques, which permit the exploration of person-to-person relationships, are highlighted in the following section on simulation exercises.

Interpersonal Relations Achieved Through Simulation

The preparation of students for entry-level public-service occupations must include an opportunity to experience meaningful interpersonal relations. Public-service employees, whether office or field workers, experience personal relationships with other people every day. The initial success of the public-service worker will depend in large measure upon his ability to interact effectively with others in the office or field. Accordingly, a principle objective of simulation exercises for entry-level public-service education is to have the student acquire the necessary interpersonal relations skills that make for success in all public-service occupations.

When developing a model public-service simulation with the principal objective being to improve favorable interpersonal relations, certain criteria must be established. These criteria may be stated as follows:

- *Interpersonal relations must be the principal component of the simulation.* Provision must be made for students to interact with others in an office interpersonal setting so

that they may work and communicate effectively with one another.

- *The simulation must be as realistic as possible.* Realism can best be accomplished by simulating an actual public-service operation in as many areas as possible.

- *Originality must play an important part.* Model simulations, currently in use, must not be copied in an effort to maintain simplicity.

- *The simulation must be interesting.* Students must be motivated to participate in the simulation and to be enthusiastic about its operation.

- *The simulation must be unstructured.* Provision must be made to allow for an awareness of events as they take place. Students must learn to cope with a situation without prior knowledge that the situation will occur.

In order for the teacher to determine if the model public-service simulation developed has, in fact, improved interpersonal relations, the simulation must be evaluated in terms of meeting the established objectives.

MEASURING INTERPERSONAL RELATIONS

Survey of Interpersonal Values

A valid and reliable instrument for measuring interpersonal relations, such as the *Survey of Interpersonal Values*, may be used for this purpose. This instrument is intended for grades 9-12, and is designed to measure the relative importance of the major factored interpersonal value dimensions. These values include both the subject's relations with others and others with himself. The value dimensions considered are:

- *Support*--being treated with understanding, encouragement, kindness, and consideration.

- *Conformity*--doing what is socially correct, accepted, and proper.

- *Recognition*--being admired, looked up to, considered important, and attracting favorable notice.

- *Independence*--being able to do what one wants to do, making one's own decisions, doing things in one's own way.

- *Benevolence*--doing things for other people, sharing, and helping.

- *Leadership*--being in charge of others, having authority or power.

A pretest on interpersonal values is administered before the model public-service simulation actually begins, and the same test is administered as a post-test after a stipulated period of time. By comparison of results, and through the use of applicable statistics, the gain in behavior modification in interpersonal relations can be determined, as a result of using the model public-service simulation.

Analysis of Interpersonal Behavior

Public-service employees should be aware of their own needs, and of the needs of other people. They should be able to recognize situations or behavior calling for professional help, and be able to refer people to such appropriate help. New employees must be able to use their knowledge of person-to-person relationships to effectively work with people.

In order to become more effective in interpersonal relationships, students must gain an understanding of:

- *Self-evaluation* - to be able to assess their own strengths and weaknesses.
- *Group Evaluation* - as a class to be able to evaluate other individuals' competencies in interpersonal communications.
- *Correction of own self-perception* - to be able to do something about the knowledge and attitudes formed by adjusting their individual behavior.

STUDENT LEARNING ACTIVITIES

- Define formal and informal social behavior.
- List the important factors in interpersonal communication.
- View and discuss the film strip, *Your Educational Goals, No. 2: Human Relationships*.
- Role play in alternate supervisor-subordinate relationships practicing effective interpersonal communication.
- Write an essay on "Defense mechanisms affect interpersonal relationships".
- View the film, *The Unanswered Question*, and discuss human relationships afterwards.

- Listen to a discussion of structured interpersonal communications and evaluate the effectiveness of the person-to-person relationship.
- In small groups, discuss the ways in which people are mutually dependent on each other.
- Use simulation exercises to practice interpersonal relations.
- List the different kinds of roles and games played in interpersonal communications.
- Debate the statement: *Understanding person-to-person relations is one of the most important skills a person can acquire for success in life.*
- Discuss how understanding interpersonal relationships can help a person to effectively work with people.
- Define the role of recognizing one's own feelings in relation to others.

TEACHER MANAGEMENT ACTIVITIES

- Have the students define formal and informal social behavior.
- Show transparencies on interpersonal relations, (*Social Sensitivity, Your Relationship with Others*) and discuss concepts afterwards.
- Assign written exercises on the important factors in interpersonal communication.
- Set up role-playing exercises on subordinate-supervisor roles in effective interpersonal communication.
- Encourage small-group discussions of the ways people are mutually dependent on each other.
- Show a movie on human relationships (*The Unanswered Question*) and discuss key points afterwards.
- Separate the class into teams to debate such statements as: *Understanding interpersonal relations is one of the most important skills a person can acquire for success in life.*
- Encourage individual study and reading in interpersonal relationships.
- Assign an essay on the worth and dignity of man in interpersonal relations.
- Bring in public-service workers who deal with others to

talk to the class about the value of effective interpersonal communications.

RESOURCES

- Your Educational Goals, No. 2: Human Relationships (Filmstrip), Curriculum Materials Corp., 1969.
- The Unanswered Question (Movie, 16mm reel, rental), Brandon Films, 1966.
- Games People Play, Eric Berne, Grove Press, 1969.
- Case Studies in Human Relationships in Secondary School, E. L. Jones, Teacher College Press, 1965.
- Human Relations: What are Your Goals? (Movie, 16mm reel, rental), United Hospital Fund, 1969.
- Communication and Communication Systems in Organization, Management, and Interpersonal Relations, Irwin Dorsey, 1968.
- Social Sensitivity, Your Relationship with Others (Transparencies), Creative Visuals, 1969.
- The Transparent Self, S. M. Jouard, Van Nostrand-Reinhold Co., 1971.
- Interpersonal Theory of Psychiatry, H. S. Perry, M. L. Gavel, Editors, Norton, 1968.
- I'm OK: You're OK: A Practical Guide to Transactional Analysis, T. A. Harris, Harper-Row, 1969.
- How to Read a Person Like a Book, G. I. Nierenberg and Henry Calero, Hawthorn Books, Inc., 1971.
- Personality Tests and Reviews, p. 1194, O. K. Buros, Gryphon Press, 1970.

Unit 7

INTERVIEWING SKILLS

Here are the contents of Unit 7 of the Common Core group. We suggest a careful reading of it before you read the text.

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Unit 7

INTERVIEWING SKILLS

INSTRUCTIONAL OBJECTIVES

1. Ability of the public-service employee to work towards becoming a good interviewer or interviewee on his job and in his life.
2. Ability to conduct referral or other interviews to obtain and verify information.
3. Ability to observe interviewees skillfully.
4. Ability to evaluate the effectiveness of an interview.
5. Ability to cope with problems that come up during an interview.
6. Ability to check an applicant's references.

CONTENT

INTRODUCTION

This unit is designed to develop the student's ability to interview people, and to obtain and verify information. It will also give trainees practice in special-purpose interviews, such as making referrals, classifying prohibited behavior, protective intervention, employment, financial eligibility, etc.

Public-service workers will be required to give different kinds of interviews on various occasions. They may be required to interview other professional personnel in their major occupational group and to grant interviews to official personnel. They will certainly be interviewed at some time for such things as jobs, raises, credit ratings, and opening bank accounts. Certain public-service workers will also be required to interview clients, patients, pupils, families, etc.

For the majority of the students, the role of an interviewer will be a new one. In the past, some of them have been the unwilling, nervous, perhaps hostile recipients of interviews by welfare workers, police, and employers. Practice interviews, relative to their future jobs, can serve as a base for proficiency in interviewing skills.

Students should acquire necessary theory and skills to become aware of the various kinds of interviews and the people who conduct them. Various types of interviews include: employment, counseling, newspaper reporting, and police interrogation. Interviews are performed by a wide variety of people: psychologists, social-service workers, lawyers, salesmen, policemen, tax inspectors, immigration officers, journalists, etc.

BEFORE THE INTERVIEW STARTS

Reasons for Interviews. The kind of interview depends basically on its reason - some give advice, some seek information, some give information. Here are some of the major reasons for conducting an interview:

- To obtain information,
- To evaluate a person's background,
- To evaluate the interviewee's character and/or personality,
- To provide information,
- To maintain good public or employee relations.

Completing Applications or Forms. Another major reason for conducting an interview is to help the public or co-workers in filling out applications or forms. In this kind of interview one needs to assist the interviewee in clarifying needed information or in filling in the form correctly. Since needed information can easily be omitted, the forms must be checked for completeness.

If a form is to be used for a later interview, the interviewer may want to prepare questions from the information furnished. Areas to look for in this case include:

- Identifying factors needing elaboration,
- Identifying factors that will bring out more information,
- Identifying factors that are not clear.

In reviewing applications or forms, there are certain critical areas to watch for, such as an interviewee's work experience. The applicant's work experience should contain sufficient details in these areas:

- Amounts of time
- Types of work experience
- Financial levels of compensation

These three factors are usually given great weight in evaluating the applicant. Other important areas to watch include the applicant's financial ability, and his prior credit references. Age should be taken into account when checking credit references. A young man or woman, for example, should not be expected to have established an extensive credit rating.

CONDUCTING INTERVIEWS

An interview is essentially an interaction between people through words and acts. During this process, knowledge is acquired by both interviewer and interviewee. It is important to note that the information sought should be purposeful and related to the reason for the interview. A license interviewer should not be primarily concerned with attempting to classify whether the interviewee's behavior requires intervention from the law enforcement agencies. Common sense should dictate that the kinds of questions asked should be determined by the "role" of the agency, and the immediate concerns of the person being interviewed.

Starting the Interview. One of the first tasks in the beginning of an interview is the establishment of rapport, or mutual liking or respect. After a friendly atmosphere has been created by putting the applicant at ease, the interviewer can ask the first question. If the interview has to do with a specific application, the interviewer should pick noncontroversial matter from the form to discuss first. Use of these techniques is designed to get the applicant talking. An atmosphere should be created that will encourage the interviewee to discuss freely what is on his mind.

Importance of Understanding People. The interviewer should have a good knowledge of human behavior and interpersonal relationships. He should realize that people often behave in an inconsistent way. They may give themselves away in an interview by saying one thing orally, and by expressing the opposite meaning in body movements. Students might want to read the resources listed in the back of this unit concerning the new art and science of body language.

The interviewer should be able to observe applicants skillfully. The responsibility of utilizing all the senses to obtain and mentally verify information received during the in-

terview occurs daily on the job. The successful social-service worker, for example, must master these techniques quickly in order to improve his effectiveness.

Guiding the Body of the Interview. Ask questions to get information. There are basically two kinds of questions - *directive* and *nondirective*.

The *directive question*, as its name implies, guides or directs the interviewee in a specific area. Directive questions can usually be answered with a few words, such as "yes" or "no." A typical directive question might be, "How long have you worked at the XYZ Company?"

Nondirective questions, on the other hand, give the interviewee a chance to say what is on his mind. Words such as: what, how, why, etc., are often used in nondirective questioning. A typical nondirective question might be, "Why did you leave the XYZ Company, Mr. Rean?"

A good technique to use to encourage the applicant to talk is to begin with a nondirective question. If the applicant does not respond appropriately to a nondirective question, then use a more directive question. An example of this technique could be:

Interviewer: "What did you dislike most about your last job?"

Interviewee: "Oh - not much."

Interviewer: "Did you feel as though your supervisor treated you fairly?"

Interviewee: "My supervisor! Why that guy was definitely not fair - let me tell you..."

In the above simplified example one can see how the interviewer began with a general question about the job, and when he felt that the applicant didn't respond appropriately, he used a more specific directive question, which in this case triggered a response from the applicant. By alternating between directive and nondirective questions, an interviewer can skillfully guide the discussion and obtain the necessary information from the interviewee.

Related Factors. Factors that will affect the relationship in the interview can either help or hinder the process. These will strengthen the relationship: interest, demonstrated concern, attentiveness, willingness to listen, and questioning for fuller understanding of issues at hand. On the other hand,

there are some factors which obstruct relationships, such as: indifference, judgmental attitudes, insensitivity, being aloof, inactivity, or being late for appointments.

Purpose of Interview. If the purpose of the interview is to help the interviewee, the interviewer should be *supportive*, and exhibit a positive and active understanding of feelings which are given expression by his behavior. However, if the interview is designed to be an interrogation of a prisoner, the method of its conduct is determined by many factors: suspect, crime, time element, and location (field, home, or headquarters).

Techniques and methods of police interrogation have had to change in recent years, and the police must now be more aware of protecting each citizen's private rights. Each suspect should be advised of his rights before his statement will be considered admissible for evidence. Citizens must not be arbitrarily subjected to interrogation; the officer must have more than just a hunch, and must be able to substantiate his reason for an interrogation. However, if an officer has good reason to be suspicious, whatever the reasons may be, he has a duty to make the inquiry or interrogation.

As can be seen, the purpose of the interview can have a drastic effect on guiding the body of the interview.

Closing the Interview. In terminating the interview, the interviewee should be told when he can expect a decision or obtain the necessary information he needs. If possible, the interviewer should answer any final questions the applicant may have.

If the applicant has to be rejected, the interviewer should accomplish this diplomatically. Courtesy and tact are especially important at this point in the interview, if a good image of the interviewer's agency is to be projected to the public.

If the interview had definite time limits, it is a good idea to remind the applicant at the beginning of this fact, and once again a few minutes before the time is up, to give the interviewee a chance to conclude his discourse.

Remembering Key Points. An effective technique for the interviewer to use during the interview is to take notes. This will help him to remember the main points of the conversation. On some occasions, however, taking notes during the course of an interview can be distracting to the applicant, or can some-

times inhibit the interviewee's responsiveness. In such cases, the interviewer should write his notes immediately after the interview. The applicant will not then be distracted, and the interviewer can remember the key points of the discussion while they are still fresh in his mind.

Problems in Interviewing. A major difficulty in interviewing involves dealing with *ambivalence* (feelings of simultaneous attraction and repulsion) and sometimes, open conflict. The interviewer should become aware of these types of applicant behavior:

- The person asks for advice, but doesn't use it;
- The person agrees to a plan, but doesn't carry it out;
- The person says one thing, and does another.

Does this ambivalence exist in only the interviewee, or does it also exist in the interviewer? In fact, the degree to which the interviewer understands himself and is aware of his own feelings has a direct effect on the conduct of the interview. Problem areas to explore include:

- *The feelings of the Interviewer.*

  Do they interfere in an interview?
  What forms of expression do they take?
  Is control of one's own feelings important?
  Why?

- *Over-involvement by the Interviewer.*

  Is this helpful or harmful?
  What kinds of behavior might result from a non-professional approach to interviewing?

Prejudice. If the interviewer is rigid and inflexible in his thinking, this could have a harmful impact on the interview. The goal of the interviewer should be to become aware of his personal biases, and honestly try to control them, so that the interview can be conducted in a fair and honest way.

Confidentiality. A public office is, in many ways, a public trust. As an interviewer, one should become familiar with the extent to which confidential information is shared by other people in his agency. The procedures for sharing confidential information should be known, and a clear definition should be given at each agency as to what constitutes confidential information. Whenever information of a confidential nature must be shared with others, it should be on a need-to-know basis, and its confidentiality should be carefully explained to the person receiving the information.

Dependence, Interdependence, and Independence.

- How are the qualities of dependence, interdependence, and independence manifested in the interview? To some extent, these characteristics exist in all people.

- Are these qualities good or bad, or does it depend upon the circumstances?

For example, a positive aspect of dependence is the ability to trust and form deep personal relationships. A negative aspect of being overly dependent is the resultant lack of self-reliance and initiative. People who are independent are usually self-confident; however, too much independence could be a problem in the interviewing process.

Interdependence among individuals can be seen in marriages, working relationships, and in interviewing. Examples of group interdependences include:

- Between agencies,
- Between agencies and the community, and
- Between local, state, and federal governmental agencies.

Undue Hurry When Questioning Applicants.

- Don't anticipate what the interviewee is going to say. It's easy to jump to conclusions; much harder to hold one's judgement.
- Another habit to avoid is putting words in the applicant's mouth.
- Don't let the applicant lead you astray in the interview.
- Get the interviewee back on the track by acknowledging his remark, and asking a directive question back on the main point of the discussion.

Controlling the Interview. The extent to which the interviewer feels a need to control the interview will, of course, be determined by the purpose of the interview. Much less control would be exerted on an interviewee in a social-service agency than in a law enforcement agency while interrogating a suspect.

Shy applicants should be encouraged to open up by asking them nondirective or open-ended questions. An overly talkative applicant can be controlled by asking more directive questions, and by watching for digressions during the discussion.

Common Weaknesses of Interviewers. Here are some of the more common faults of interviewers:

- *Talking too much* - especially in those interviews that are designed to get information from the interviewee.
- *Guiding applicant too much* - particularly in those interviews that are designed to allow the interviewee to express whatever is troubling him.
- *Dominating the interview* - it should be a process of give and take.
- *Talking down to the applicant* - this condescending attitude can usually be spotted pretty easily.
- *Failing to listen* - a common fault, however, inexcusable for an interviewer.

AFTER THE INTERVIEW

Evaluating the Interview

- What information was learned about the applicant?
- Was it sufficient?
- What was not learned that should have been?
- If problems came up in the interview, who made the decisions?
- What was the role of the interviewer and interviewee?

Some of the factors involved in decision-making are:

- Facts involved - how are they maintained?
- Availability of acceptable alternatives.
- Readiness to take action.

There are definite dangers to be aware of when making decisions or evaluating an interviewee. One such danger is irrational prejudice. Each of us is biased to a certain extent, either for or against certain ethnic, racial, or religious groups. The better the interviewer understands himself, and in particular the more he is aware of his personal beliefs towards certain individuals and groups, the better off he will be for having recognized them. He can then compensate for any prejudicial bias.

This bias could work in the opposite manner. For example, an interviewer could be so blinded by an applicant's good traits, that he would not see his faults because of this *halo effect.*

Checking References. A part of the process of many interviews involves the actual checking of personal references for these purposes:

- To verify information obtained from the application and interview,
- To obtain an evaluation by people who know the interviewee's work history,
- To obtain additional information not disclosed on the application or during the interview.

Additional verifying information may be obtained from letters of reference supplied by the applicant. There are some disadvantages to letters of reference. They may be vague or even dishonest. Sometimes, such letters may not contain the information sought. Quite often, information supplied directly by the applicant's past employers is the best source to use.

When evaluating replies, consider these factors:

- They may not be complete,
- They may be vague to cover negative factors,
- They may contain information taken from records which may not tell the complete story.

Obtaining Information from References. Letter writing is a standard way of obtaining information about an individual. However, since a letter may take too much time, or cost too much, it is recommended that the telephone should be used whenever possible. One reason for the telephone's effectiveness is that a direct contact with the reference is possible. This makes for better communication, since specific questions and follow-up answers can be obtained. In addition, doubts and omissions can be picked up from the person's voice.

Before making a telephone call to a reference, a checklist of questions should first be prepared. In talking to the reference, the following guidelines should be utilized:

- Establish rapport,
- Be businesslike,
- Let reference talk freely,
- Don't put words in respondent's mouth,
- Probe for strengths and weaknesses.

A personal visit is sometimes advantageous, and can often be more effective in bringing out more information about the applicant. In such cases, arrange to meet the reference and use the same principles as in the telephone checks.

Finally, information may be obtained concerning references by the hiring of outside investigators. This method has the advantages of getting more personal and more objective information. There are, however, certain disadvantages: the outside investigator may not obtain the best available information, and there may be considerable expense involved.

STUDENT LEARNING ACTIVITIES

- Participate in role-playing exercises after being given a brief introduction to the basic techniques of interviewing.
- Role-play in a wide variety of interviews, such as employment, welfare eligibility, and license application, and gain experience as both an interviewer and interviewee.
- Observe interviews during role-playing exercises, evaluating what the interviewee is communicating.
- Listen to examples of interviews on tape, and be prepared to discuss the techniques used to overcome problems that developed during the interview.
- Interview public-service workers in your community about their jobs to learn more about careers, and practice newly acquired interviewing skills.
- Write a short essay on how to conduct an interview. Include the start, guidance, conclusion, and evaluation of the results.
- Talk to public-service employees who do a great deal of interviewing in their jobs. Be prepared to discuss questions with them.
- Talk to your school guidance counselor or psychologist about interviewing skills.

TEACHER MANAGEMENT ACTIVITIES

- Plan on utilizing role-playing exercises to practice knowledge learned.
- Have students play both the interviewer and interviewee in various types of interviews, such as eligibility, employment, license interviews, etc.
- Prepare tapes of different types of interviews, and play them for the class to discuss and evaluate.
- Encourage students to use all their senses as interviewers to carefully observe what is being communicated by the interviewee.
- Encourage individual practice of interviewing skills whenever possible, such as with local public-service employees.
- Assign short essays on the process of interviewing: starting, guiding, concluding, and evaluating.

- Obtain specialized interviewing materials, such as public-safety techniques from neighboring police departments.
- Arrange to have public-service workers come into the class to talk about interviewing techniques.
- Provide opportunities for the school guidance counselor or psychologist to discuss interviewing skills.
- Approach the theory of interviewing through practice situations whenever possible.
- Borrow interviewing films from the local library or educational resource center.

RESOURCES

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Unit 8

APPLYING FOR PUBLIC SERVICE JOBS

Here are the contents of Unit 8 of the Common Core group. We suggest a careful reading of it before you read the text.

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Unit 8

APPLYING FOR PUBLIC-SERVICE JOBS

INSTRUCTIONAL OBJECTIVES

1. Ability to obtain information on current job opportunities in the various occupational areas found in the public service field.
2. Ability to understand the qualifications and hiring process for civil service jobs.
3. Ability to develop a systematic approach to finding a job in public-service occupations, and to plan and organize the job search.
4. Ability to gather information needed for preparing job applications.
5. Ability to understand implications of questions on civil service job application forms, and to respond with clarity and directness.
6. Ability to develop understanding and attitudes necessary for taking written examinations for public-service jobs.
7. Ability to select, organize, and present ideas in job interview situations before a qualifications appraisal (oral interview) panel.
8. Ability to make a viable career decision and establish a career direction and goal for continued career development.

CONTENT

INTRODUCTION

This unit is designed:

- to provide an awareness of the basic skills required for employment,

- to impart an understanding of the recruitment and examination process used to fill public-service jobs, and
- to describe procedures, methods, and techniques for applying for a job in the public-service career field.

In presenting this unit, the emphasis will be placed on:

- the understanding of basic job finding and job application techniques,
- the importance of deciding upon an occupational choice,
- the necessity for exploring job requirements in the public-service career field, and
- the importance of planning and organizing the steps to be taken in applying for a job in the public-service field.

THE PUBLIC SERVICE CAREER FIELD

As a first step in applying for a job in public-service, attention should be given to understanding the field of public service, and identifying the occupational groups found therein. It is assumed that much of this information has already been covered in prior course work. An earlier publication in this curriculum series, *Orientation to Public Service Occupations*, can be used as a reference in this regard. However, a brief discussion of public-service occupations follows to highlight the wide range of jobs found in public-service occupations.

General Occupational Areas. Public-service employees are at work in occupations representing nearly every kind of job in private industry, as well as some unique to the federal government, such as Postal Clerk, Foreign Service Officer, Immigration Inspector, Border Patrolman, and Internal Revenue Agent. Practically all federal employees are found in jobs under the civil service merit system.

Public service workers are a significant part of the nonagricultural work force in every state. Their jobs are found in units of local governments such as counties, municipalities, towns, and school districts. In addition, more than one-fourth of the state and local government work force are employed in state government agencies.

Federal, state, and local employees are at work in offices and laboratories; public schools, colleges, and other educational services and programs; in hospitals, clinics, and libraries; in police and fire protection; in housing and urban renewal; in highway construction and maintenance; in parks and recreation; in public utilities; and in natural resources and conservation.

Public-service workers perform general and financial control activities; work in sewage disposal and water treatment systems; in tax enforcement programs; and in the administration of justice.

Public-service workers collect and distribute the mail; take care of disabled veterans; administer employment, social security, welfare, and health programs; and inspect foods and drugs to see that they are pure.

They check and improve the quality of fruits, vegetables, and other agricultural products; maintain our national parks; forecast the weather; and perform research in the fields of electronics, radio, and radar. They explore the ocean depths and the reaches of space.

All of these activities and functions require workers in such varied occupations as clerk, economist, mathematician, engineer, electrician, forester, educator, pipefitter, and custodian. Clerical, administrative, custodial, and maintenance workers constitute a significant proportion of all employees in many areas of government activity. When we consider the many different governmental agencies, programs, and jurisdictions, and the variety and spread of activities and functions found within them, we can readily see that a diversified work force, with many different levels of education, training, and skill, is required.

The Working Members in Public Service

The thousands of people working in the public-service field come from various socioeconomic levels, and possess many varied skills, aptitudes, talents, abilities, and experiences.

Public-service activities are carried out in offices, establishments, institutions, agencies, schools, and research foundations located in every city, county school district, and State Capitol. The principal offices of most federal agencies are located in Washington, D.C., and their field establishments are scattered throughout the United States and its territories; some even being in foreign countries.

THE EMPLOYING AGENCIES

The Civil Service Merit System. With few exceptions, almost all occupations in public service fall under civil service merit systems. Under the merit system, appointments to jobs are made on the basis of ability to do the work - ability demonstrated in competition with other applicants.

All qualified applicants receive consideration for appointment

without regard to any other factor than the results of oral and written examinations. This is a democratic way to fill jobs. It is also a way to make sure that competent persons are hired. Since interested applicants compete with one another for these positions, they are called *competitive positions*. Federal civil service competitive examinations may be taken by all persons who are citizens of the United States, or who owe permanent allegiance to the United States (in the case of residents of American Samoa).

Examinations vary according to the types of positions for which they are held. Some examinations include written tests, others do not. Written tests examine the applicant's ability to do the job applied for, or his ability to learn how to do it.

Applicants are sometimes selected for public-service jobs on the basis of non-written examinations. In non-written examinations, applicants are rated on the basis of the experience and training described in their job application, and any supporting evidence required.

Students should ensure that their applications are filled out carefully and that the information which they provide is clear, complete, and concise. Many disappointed applicants have obtained low eligibility ratings, or have been rated ineligible, because they did not take the time and trouble to read the job announcement carefully and fill out the application forms completely.

State and Local Government Positions. As with the federal civil service, a majority of state and local government public service positions are filled through some type of formal civil service test, and personnel are hired and promoted on the basis of merit.

In some areas, broad groups of employees (such as teachers, firemen, and policemen) have separate civil service coverage which applies only to their specific groups.

Applying for a Job. Almost all types of jobs found in private industry are found in the public-service field.

However, the state, county or city personnel offices, and area offices operated by the U.S. Civil Service Commission, accept applications for specified types of occupations only when there is a need to fill such positions.

CHOOSING A CAREER FIELD

What steps should the student take to help in planning his career choice and development? How well does the student know himself? Does he know about the qualifications needed for occupations in the public service career field? Does he know about the world of work?

These are important considerations for any job. Has the student thought about them?

Gaining Awareness of One's Interests and Abilities. An individual's interests and abilities go hand-in-hand when considering a career or occupational choice, when planning career development, and when planning the job search. He may have interest, but possess little ability, and would not therefore be able to greatly achieve in a career field. On the other hand, if a student possesses little interest in a career, notwithstanding the fact that he has the ability to perform, he would be ill-advised to choose it for his life's work. *Thus, the student must have both interest in, and ability for, the career field he chooses.*

Interests. Students should find out what their interests are:

- What school subjects are most liked?
- What hobbies, sports, clubs, or part-time jobs are engaged in?
- Is music an important part of his life? What type?
- What kinds of reading are done?

A student who may want to think more deeply about his interests may find an *occupational preference test*, or *interest inventory*, helpful in assisting him to relate his interest pattern to the occupations of his choice. A guidance counselor will discuss interests in terms of requirements for various occupational areas. However, students should understand that an interest inventory cannot tell them whether they have the *ability* to perform well in certain occupations.

Abilities. In addition to his interest, one should give serious consideration to his abilities. A good place to start is considering the grades made in some of the school subjects, as in English, languages, social science, history, mathematics, and science, and then listing the strengths and the weaknesses. In addition, the thoughtful person may wish to review his accomplishments in aptitude and achievement tests. These scores may also indicate strong and weak areas of ability. Further-

more, much assistance in this planning can be obtained from discussion of accomplishments and career plans with parents, teachers, and counselors.

It is extremely important to get a clear idea of one's interests and abilities, so there will not be much focus on an occupational field that may be out of reach, or at a level of skill and ability which may under-utilize his capacities and skills. It is equally important that he should choose an occupation that will challenge him, in work that is commensurate with his abilities. This will make his career more rewarding.

Gaining Awareness of Pertinent Personal Factors. As people look at themselves to learn more about their interests and abilities, it is also important to look at other significant personal factors and attributes. Working in the public-service career field generally demands that these individuals must work well with others, either as a member of a team, or of a group performing various activities and functions toward a common goal. It is appropriate to consider how well one gets along with teachers, friends, and neighbors. *Ability to associate well with one's associates is a key to success in whatever endeavor one chooses.*

It is important, and true, to know that a specialized skill may sometimes be no more valuable than a pleasant, cheerful attitude. Students should give some thought to discovering those things they like and dislike, and those biases, prejudices, and inhibitions they may have. On the more positive side, it is well to evaluate how well one can express his feelings, needs, ideas, and strong points.

Importance of Communication Skills. Communication skills are basic to many jobs. Communication is the transfer of information between people; as, for instance, from:

- one person to another,
- one worker to another,
- the businessman to the customer,
- the scientist to the layman,
- the teacher to the student,
- the parent to the child,
- the applicant to the personnel interviewer.

Communication calls for trained men and women who can deal with new subject matter, grasp the essentials, and transmit and pass

ideas and facts on to others. No business or endeavor can exist without the use of words. Reading, writing, listening, and speaking have essential roles in applying for a job, and play an important part in the successful performance of almost every endeavor. A job applicant uses language skills to fill out a work application, and to participate in a job interview. It is important to remember that the first impression one makes on a would-be employer may be the most important, and final, impression of all.

The job application and resume should be grammatically correct and correctly punctuated. Use of correct grammar during the oral interview may not get one the job, but the lack of it may make one the least likely candidate for the position.

In many public-service jobs, workers are expected to write memorandums and reports, to develop catalogs, training materials and manuals, to disseminate information, or to talk to groups. If applicants are clear, accurate, and concise in writing and speaking, chances for a good job are improved. *The more easily one can express his ideas, the more self-confidence he is likely to feel.*

CONSIDERING A PUBLIC SERVICE OCCUPATION

Selection of one's lifetime occupation is one of the most serious and important steps he ever takes, but, in doing this, one must remember that:

- Occupational choice takes a great deal of time.
- Occupational choice requires a great amount of knowledge about different careers.
- Occupational choice involves much real thought about future goals and expectations.

Selecting the Occupational Group. When thinking about selection of a career in public service, one should become acquainted with the many different occupational groups within the public-service career field; it will be helpful to make mental notes of those occupational categories found to be most attractive.

Since there are so many different occupations within the public service career field, it is perhaps easier to start by selecting from broad occupational groups or families, such as professional, technical, managerial, clerical, or other groups that attract the prospective worker.

Selecting the Occupational Specialty. Once a selection has been made of the occupational groups, proceed to the occupational specialties within those groups, and again find those that are of most interest. When the most attractive occupational specialty has been determined, there is then a need to learn about its educational and experience requirements, and about the responsibilities of the job, in order to determine the necessary qualifications to perform the job. Students will find the curriculum guideline, *Orientation to Public Service Occupations*, and the *Dictionary of Occupational Titles*, a publication of the Manpower Administration, the Department of Labor, of assistance in providing information about skills and requirements of a variety of occupations.

Becoming Aware of Possible Positions. General announcement bulletins tell about job vacancies in many fields. These bulletins should be read carefully to learn:

- The experience and education which is needed before the application will be accepted,
- Whether a written test is required,
- Where the jobs are located, and
- What the pay is.

The announcement will provide instructions for submitting the job application, and will state the closing date for acceptance of applications. Applications will many times be accepted from students who are taking courses which would permit them to meet the qualifications requirement of the position being sought, and who expect to complete the courses within nine months.

Getting More Information About the Position. The U. S. Civil Service Commission, through its system of area offices located in centers of federal population, announces and conducts examinations; checks applicant's work experience, training, and aptitude; and sends the names of persons who meet the requirements to the agencies seeking new employees.

Each area office also provides, through its *Federal Job Information Center*, a complete one-step information service about federal job opportunities in the immediate area, and in other locations. These Centers provide, at no charge to the applicant, complete information about current job opportunities in any part of the United States, vacancies in *shortage categories* occupations in particular demand by the various federal agencies, opportunities for overseas employment, and employment counseling service. They are especially equipped to answer all inquiries about federal employment opportunities.

Information about current job opportunities and application forms may also be obtained in the local post office, in state, county, or city personnel offices, in public libraries, and school and college placement offices. Recruitment notices are frequently published in newspapers, usually in the classified ad sections.

Closing Dates for Filing Applications. Applications are accepted by the Civil Service Commission or its area office, or by the state, city, county, or local district, as long as the announcement is in an *open* state. In most (but not all) instances, the closing date for filing the application is stated in the announcement. If the closing date is not stated, filing is on an open and continuous basis, and public notice of the closing date is given later. In some cases, the federal government permits persons who cannot apply on time because they are in military service, to apply after the closing date, provided that they apply within 120 days after an honorable discharge date.

ENTRANCE REQUIREMENTS FOR THE POSITION

Reading the Job Announcement. The job announcement should be read carefully. It gives information about the positions to be filled and the required qualifications.

The applicant may prefer to work near his home. If the announcement specifies that the jobs to be filled are in a certain locality and the applicant does not want to work in that location, he should not file for the job. On the other hand, he may wish to pay particular attention to more localized employment opportunities in city, county, or state jobs. Federal employment frequently offers many opportunities to live and work away from home.

Unpaid experience or volunteer work (such as in community, cultural, social service, youth, and professional associations) will be given credit on the same basis as that given for paid experience, if it is the type and level acceptable under the announcement. Such experience should be reported in one or more of the experience blocks on the application or personal qualifications statement. The actual time spent in such activities, such as the number of hours per week, should be shown in order to receive proper credit.

The announcements provide specific information about the levels of experience needed. An applicant must be able to show that he has had experience or education at a level comparable in difficulty and responsibility to the specifications listed on the announcement.

Determining Education Requirements. Educational entrance requirements for civil service jobs vary widely. Persons entering into professional occupations are usually required to have highly specialized knowledge in a specified field, as evidenced by completion of a prescribed college course of study, or the equivalent in experience. Typical occupations in this group are physicist, scientist, and engineer.

Entrants into administrative and managerial occupations usually are not required to have knowledge of a specialized field, but rather must indicate by education or responsible job experience, the potential for development. The entrant usually begins at a trainee level and learns the duties of the job after he is hired. Typical jobs in this group are purchasing aide, budget aide, claims examiner, administrative assistant, and personnel aide.

Persons having high school, junior college, or technical school training may apply for such entry-level positions as technician clerical aide, laboratory assistant, supply clerk, educational aide, or Forest Service aide. The entry-level position is usually that of learner or trainee, in which category the duties and specifics of the job are learned, and the skill is improved.

Determining Age Requirements. Although there is no legal discrimination because of age, most individuals are between the ages of 18 and 65 when hired; the usual minimum is 18, although at the age of 16 high-school graduates may apply for some jobs. If the student is 16 or 17 and out of school, but not a high school graduate, he may be hired only:

- if he has successfully completed a formal training program,
- if he has been out of school at least 3 months, and
- if school authorities sign a form furnished by the hiring agency, agreeing with the individual's preference for work instead of additional schooling.

If the student is still in high school, he may be accepted for work during vacation periods if he is 16, or for part-time work during the school years if he is 16, and meets these conditions:

- His work schedule is set up through agreement with his school,
- His school certifies that he can maintain good standing while working, and
- He remains enrolled in high school.

At the other end of the scale, most public-service agencies will not hire an individual who is over 65 years of age.

Determining Citizenship Requirements. Normally, only American citizens and (American Samoans) may apply for competitive examinations in the Federal Civil Service. Other public-service agencies may require that the applicant be a U. S. citizen or declare his interest to become a U. S. citizen.

Determining Physical Requirements. Candidates for public-service jobs must be physically able to perform the duties of the position, and must be emotionally and mentally stable. Often, a complete physical examination performed by a physician is required before a person can be appointed to a public-service position.

A handicap will not disqualify an applicant if he can perform the work efficiently without being a hazard to himself and others.

The federal government has a special program to encourage the employment of handicapped persons. It recognizes that, in almost every kind of work, there are some positions suitable for the blind, the deaf, and others with serious impairments.

For most positions candidates must have good distant vision in one eye, and be able to read, without strain, printed material the size of typewritten characters. Candidates may use glasses to meet these requirements.

Persons appointed are usually required to hear the conversational voice. A hearing aid may be used.

An amputation of an arm, hand, leg, or foot does not in itself bar a person from federal, state, or local government employment. The criterion is whether the person can handle the job satisfactorily without hazard to himself and others.

However, positions in such occupations as policemen, firefighters, and border patrolman, can be filled only by persons in good physical condition. Physical requirements are normally described in detail in the job announcements.

THE JOB APPLICATION

The application is the first step in the examination process, and will constitute the first real contact with the prospective hiring authority. It is, therefore, important that the application be completed carefully and completely.

Detailed requirements of the data required and instructions for filling out and filing the Personal Qualifications Statement, and employment application forms used by the various state, county, city, and municipal civil service boards, are generally attached to and made a part of the application form. Applicants should read these instructions carefully before entering any information on the form.

Assembling the Required Data. The first task in completing the application is to select, arrange, and organize the data needed. To determine needed data, in addition to the requirements listed on the application, the applicant should ask himself, and provide the data to answer, *What parts of my training and experience are relevant to the job goal?*

Prospective applicants may find it helpful to set up a personal file of information needed to complete the application. The file should contain such information as:

- Date of birth,
- Social Security Account Number,
- Names and locations of schools attended,
- Dates of attendance,
- Courses taken,
- Dates of completion,
- Diplomas and/or certificates earned.

In addition, work history should be listed. The work experience should include all data relevant to each job:

- Name and address of each employer,
- Beginning and ending dates of employment for each job,
- Name of supervisor or immediate superior,
- The job title of the position held,
- A brief, concise description of the work performed, and
- The reason for leaving the job.

The personal file should also include the names and addresses of individuals who are willing to provide personal recommendations as to character or skills. Of course, *permission should be obtained from referenced individuals before their names are provided on a work application.*

Filling Out the Application. When sure that he meets requirements listed in the announcement, and that he has gathered all

the information necessary for completing the application, the applicant is ready to fill out the application form.

For some job opportunities, he may have to fill out, at first, only a small card that will be used to admit him to an examination room; sooner or later, however, he will have to fill out a two or four-page Personal Qualification Statement or application for employment.

The application should be complete and neat. Information should be filled in with typewriter or pen and ink.

Need for Completeness. Every question on the application form or Personal Qualification Statement must be answered fully and accurately. If every question on the form is not answered, the Area Office of the Civil Service Commission, or the state or local civil service board will have to write the applicant to get the missing information. This takes time and causes delay, and could mean loss of employment opportunities.

For many positions, written tests are not required, and applicants are rated solely on their training and experience. Obviously, an applicant cannot get credit for experience or training which he does not claim on his application.

Need for Honesty. It is also important that applicants be completely truthful in all of their answers. False statements on an application can have serious consequences, and may be grounds for an ineligible rating for employment. In some cases, untruthful answers may even leave one open for prosecution for perjury.

Need for Timeliness. The application should be signed and dated. Instructions in the announcement should be followed as to when and where to send the application. To be considered, applications should be sent to the appropriate office not later than the final filing date.

Importance of the Application. It cannot be stressed too strongly that the application is a part of the examination. It represents the applicant. The information entered on the form will be used to determine that the applicant does or does not meet the entrance requirements, and it may be the basis for arriving at the final rating in the examination. Acceptability for an examination is based on the information provided on the application for that examination, even though the applicant may have prior applications on file.

All applications and supporting documents and attachments become the property of the U. S. Civil Service Commission or other civil service board. None are returned.

THE EXAMINATION

The Competitive Examination. If the examination announcement indicated that a written test will be given, a notice will be sent to the applicant telling him when and where to appear for the test. The written test will usually be practical in nature. It will test the candidate's ability to do the job for which he applied, or it will test his ability to learn how to do it.

Studying for the Examination. The student should review the examination announcement carefully to learn as much as possible about the position for which he has applied. The position description will offer some clues as to the subjects which will be tested.

In addition, the examination announcement often has a section called *Scope of Examination* or *Knowledges and Abilities Required.* These sections will help the student in finding out specifically what fields will be tested.

The information in the announcement will also be helpful in choosing suitable study materials. A number of civil service study guides and publications are available at public libraries for self-study in preparing for an examination. Other sources of information are training manuals and publications of a government agency which employs workers in the job for which an application is being made. The applicant may also obtain specific study suggestions by writing or visiting the government department involved. A letter or visit to the agency may also provide specific information as to the exact nature of the position being sought.

Preparing for the Examination. Chances for success on a civil service examination can be increased if common sense is exercised. Nervousness and fatigue are among the most common ressons why applicants fail to do their best on tests.

Applicants should be reminded to:

- Begin preparation early.
- Prepare continuously.
- Locate the place of the examination.
- Relax the night before the test.

- Get up early enough on the day of the examination to allow sufficient time to get to the examination room, with time to spare.
- Dress comfortably.
- Leave excess paraphernalia at home.
- Relax and prepare to listen to the instructions for taking the test.

The Examination Period. Best results are obtained when applicants listen carefully to all instructions, follow directions, and ask questions of the test administrator or monitor when they do not understand what to do.

Civil service examination papers are generally identified by number only. Candidates are assigned numbers for this purpose.

Overall time limits are set for the written test. Candidates should gauge their time carefully in order to complete the test within the time limits. One method is to divide the total time in minutes by the number of questions to get the approximate time one has for each question.

Many capable people are unsuccessful in examinations because they fail to read the questions carefully. It is important that all questions be answered, and that, if time permits, answers be reviewed.

The Unassembled Test. If one applies for a position that does not involve a written test, the rating is based on the experience, education, and training described in the application for work, and any additional information secured by the civil service board, or the Area Office of the U. S. Civil Service Commission, as well as through an oral interview process before a Qualifications Appraisal Panel. Qualifications may also be verified with former employers and supervisors.

In federal civil service announcements that cover several grades or salary levels, the applicant is rated for those he qualifies for, but he is not rated for any grade that pays less than the minimum pay he stated he would accept.

The Oral Interview. The basic purpose of the Qualifications Appraisal Panel is to orally evaluate the candidates' qualifications, not otherwise measured by a written test, to perform the duties of the position or class for which they are being interviewed, and to establish a ranking for qualified candidates.

The qualifications appraisal or oral interview is generally the final step in the examination process. Its importance is demonstrated by the fact that 40 percent or more of the total score may be assigned to this part of the examination.

In conducting the appraisal, members of the panel are not particularly influenced by the fact that all competitors have passed earlier portions of the examination. Each part of the examination is important in its own right.

An underlying and basic question which concerns each member of the panel is: *If I were the appointing authority, would I hire this individual with reasonable confidence that he could handle the job successfully?*

Preparing for the Interview. Applicants can prepare for the oral interview by thinking about the above question, and having information about his work experience and job-related courses well in mind. Preparation for the interview will prove its worth. If the student has thought through the manner in which he will present his experience and education, he will be able to bring forth points that will help to establish his qualifications for the position.

Rating the Competitors. The panel will rate competitors on competitive factors, which frequently include the following:

- *Impression.* Behavior and dress appropriate to the position - tact, poise, neatness and grooming, and maturity.
- *Presentation.* Communication skills appropriate to the position.
- *Readiness.* Background and abilities as preparation for this position. Background includes education and experience, work record, self-improvement efforts. Abilities are considered in terms of ability to deal with the practical problems of the job; ability to work effectively with people; ability to adjust to changes in assignment, policies, procedures, etc.

Procedures of Interviewing. Generally, the following procedures are followed in interviewing the candidate:

- Panel members review the candidate's application, to familiarize themselves with the applicant's background, work experience, and educational qualifications.
- The candidate is brought in and introduced to the panel members.

- The Chairman of the panel explains the purpose of the interview and asks the candidate to describe the major duties and responsibilities of his present or last job.
- The panel members ask questions that will encourage the candidate to explain his work experience and qualifications.
- After the candidate's experience and qualifications have been fully developed in the interview, and panel members have no more questions, the Chairman will ask the applicant if he wishes to add anything that he feels has been overlooked.
- After the candidate leaves the room, the panel members discuss how well the candidate's qualifications meet the standards for the position, and assign a rating.

Ratings are based exclusively on the information brought out during the interview, or on the candidate's observable behavior in the interview. The ratings are estimates of the candidate's potential success in the position for which he is competing. The ratings are not judgments of his effectiveness in his current job.

THE ELIGIBILITY LIST

Persons who are found to meet the requirements in the announcement are called *eligibles*. The eligible list is made up of those persons who have passed the written and/or the oral examination, and have received a grade.

Scoring for Eligibility. Scoring procedures differ in detail, although the general principles are the same. The papers are usually graded by number, whether or not they are hand-scored or scored by machine. That is, the individual who marks the papers knows only the identification number and not the name of the applicant. Not until all the papers have been graded, will they be matched with names. If other tests, such as for training and experience, or qualifications appraisal (oral interview) ratings have been given, scores will be combined. Different parts of the examination usually have different weights. For example, the written test may count 60 percent of the final grade, and the oral interview rating 40 percent. Veterans may have a certain number of points added to their grades.

Placement on the List. After the final grade has been determined, the names are placed in grade order and an *eligibility list* is established. There are various methods for resolving ties between those who get the same final grade. One of the most common is to place first the name of the person whose

application was received first. Job offers are made from the eligible list in the order the names appear on it. An eligible's chances of getting a job, therefore, depend on his standing on this list, and how fast agencies are filling jobs from the list.

Candidates are notified of their grade and rank order as soon as all of the computations have been made. This is done as rapidly as possible.

Cooperation with the Applicant. Practically all civil service jurisdictions want applicants to understand how their programs operate, and most will permit candidates to review their test papers. Usually this can be done during a specified time after notifications of disqualification or eligibility have been sent.

Filling Jobs from the Eligibility List. When a job is to be filled from the eligibility list, the agency asks the Area Office of the U. S. Civil Service Commission, or the appropriate civil service jurisdiction, for the names of people on the list of eligibles for that job.

Generally, when the civil service office receives this request, it sends to the agency the names of the three people highest on the list. Or, if the job which is to be filled has specialized requirements, the office sends the agency, from the general list, the names of the top three persons who meet those requirements.

The appointing officer makes a choice from among the three people whose names were sent to him. If the elected person accepts the appointment, the names of the others are put back on the list to be considered for future openings.

For most vacancies, the appointing officer has his choice of any one of the top three eligibles on the list. For this reason, it is not automatic that the person whose name is on top of the list always gets the appointment.

APPOINTMENT TO A POSITION

Kinds of Appointments. Most appointments in the federal civil service are either career (or permanent), term-career (conditional), or temporary.

A temporary appointment does not ordinarily last more than one year. A temporary worker cannot be promoted, cannot transfer to another job, and is not under the retirement system.

A term appointment is made for work on a specific project that will last more than one year but less than four years. A term employee can be promoted or reassigned to another position within the project for which he is hired. He is usually not under the retirement system. Names of persons who accept temporary or term appointments will remain on the list of eligibles from which they were appointed. Thus, they will remain eligible for permanent jobs that are normally filled by career-conditional or career appointments.

A career-conditional appointment leads after three years service to a career appointment. For the first year, the employee serves a probationary period. During this time, he must demonstrate that he can do a satisfactory job, and may be dismissed if he fails to do so. A career-conditional employee has promotion and transfer privileges. After he completes his probation, he cannot be removed except for cause. However, in reduction-in-force (layoff) actions, career-conditional employees are dismissed ahead of career employees.

A career employee serves a probationary period as described above, and has promotion and transfer privileges. After he completes his probation, he is in the last group to be affected in layoffs.

Veterans' Preference. Veterans may be eligible for additional benefits in getting a public-service job. Examination requirements may be waived, and in some circumstances, Vietnam veterans may be hired without competing against other applicants.

Extra examination credits in the form of extra points are added to the veteran's final examination passing score., Disabled veterans or their wives, widowers of certain veterans, and widowed or divorced mothers of some veterans who died in service, or who are totally and permanently disabled by a service-connected disability, usually get 10 extra points. Most other honorably discharged veterans get five points added to the earned scores received on examinations, depending upon length or dates of service.

General Requirements for Appointment. There are certain requirements that must be met before appointment. These requirements are over and above the requirement that one must be able to do the work of the position for which he is being considered.

These requirements include:

- *Age:* The usual minimum age limit for a federal job is 18 years, but for most jobs, high school graduates may apply at 16, provided that local child-labor laws permit. An

application can be made if the student expects to graduate from high school, or to reach his 18th birthday within six months from the date of filing, but he may not be appointed until he meets the age requirement.

- *Citizenship:* Candidates must usually be American citizens, or file an intent to become an American citizen.

- *Physical Condition:* The candidate must be physically, emotionally, and mentally able to perform the duties of the position. As previously stated, a physically handicapped individual is not automatically disqualified. His abilities are assessed to insure that he is not discriminated against because of his handicap.

- *Residence Requirements:* Residence requirements for many public service jobs are waived. However, appointments to some positions in Washington, D.C., are apportioned by law among the States and territories.

  Persons being considered for these positions may be required to submit proof that they meet a one-year residence requirement. When necessary, this proof is requested by the agency considering the candidate for employment.

Security Requirements for Appointment. Before one is hired for the federal civil service, an investigation is made to determine whether the candidate is reliable, trustworthy, of good conduct and character, and loyal to the United States. If the appointment is to a sensitive position where the employee has access to *classified information,* a determination is also made as to whether the individual's employment in the Government service would be clearly consistent with the interests of the national security.

Fingerprints are taken either when one reports for duty or when an investigation has begun. The fingerprints will be sent to the Federal Bureau of Investigation for checking against their records. Applicants must list all convictions other than those for minor traffic violations, or those committed before their 21st birthday and which were finally handled in a juvenile court, or under a youth offender law. Failure to give this information could result in denial or dismissal from federal employment, possible prosecution for perjury, and from employment with other civil service jurisdictions.

ON THE JOB AFTER APPOINTMENT

Probationary Period. After appointment, the worker will serve a probationary period, generally required by most civil service

jurisdictions, which may last from six months to a year. After the worker has served satisfactorily on probation, he will be notified that he has civil service status with all the related rights.

Pay. Generally, salaries of federal, state, county, and other civil service workers are comparable to those paid by private employers for similar work. Civil service salaries are reviewed frequently, and changes made as needed.

There are several pay plans in the public-service career field. Each grade has a set salary range. In all cases, salaries are listed in the civil-service announcement of position openings. Employees are usually hired at the first rate of grade. If they do their work at an acceptable level of competence, they receive within-grade increases at intervals, until the top rate of the grade is reached.

Hours of Work. The usual work week for federal, state, and local government agencies is 40 hours. Most public service employees work 8 hours a day, five days a week, Monday through Friday. In some cases, the nature of the work may call for a different workweek. This is particularly true in public-safety positions. Required overtime can be compensated for either by pay or by compensatory time-off.

Vacation and Sick Leave. Public-service employees earn both vacation and sick-leave credits. Their earnings of vacation and sick leave may be according to the number of years they have been in service. Sick leave can be used for illness serious enough to keep the employee away from his work and for medical and dental appointments. Unused sick leave can be saved for future use. Vacation leave may be used for vacation purposes, and may be used to supplement sick leave for prolonged illness.

After Appointment to the Job. Even after the applicant has located a job in the public-service career field that he likes and can do well, he may think that there is nothing more to be done. This is not true. As the new employee gets to know his job better, he will find that he can prepare himself after working hours for more advanced jobs in the federal agency, or in the state, city, county, or local jurisdiction that employs him.

The employee will want to do his job well and prepare for the years ahead by learning more and more about the work of his agency, and becoming more useful on the job. Career develop-

ment and promotion programs in every agency are designed to make sure that promotions go to the best qualified employees. How fast public-service career employees advance and are promoted depends upon openings in the higher grades, and upon their own ability and effort in getting more education or training to enable them to do better work.

Promotion and Transfer. Agencies consider the qualifications of an employee for promotion as higher grade positions become vacant. Normally, promotional opportunities are limited to those public-service workers who have satisfactorily completed their probationary period. Generally, individuals interested in promotion are required to take a promotional examination to become eligible for advancement. As with open examinations, announcements are made of promotional examinations. *A basic philosophy of public-service agencies is to encourage individuals to take any promotional examination for a position the applicant is qualified for and would like to have.*

Transfers may be made to positions in other agencies. However, in the case of a transfer, the employee has to *find his own job*, by such means as interviews with officials in those agencies. If he can find a vacant position in another agency, and if the hiring officer is interested, arrangements may be made to transfer him. Federal Job Information Centers and local civil service boards may be able to assist employees in locating vacancies.

Retirement. Public-service employment generally has the advantage of well-established retirement systems. The provisions and amounts differ, depending upon the civil service jurisdiction. Generally, government employees contribute a percentage of their pay to their retirement system. This contribution is deducted directly from the employee's paycheck. A disability provision is also included in most retirement programs.

THE FUTURE OF PUBLIC-SERVICE MERIT SYSTEMS

Every American citizen has a continuing interest in the future of the federal government, and of his state, county, municipal, and local jurisdictions. All citizens have an opportunity to participate in the government process, but public-service employees have a special opportunity and responsibility to review and respond to the needs of government.

As a citizen, the student should be aware that it is important to him to protect his interest in government by seeing that only the best qualified persons are selected as public-service employees. The public-service merit system, which insures that

all qualified persons will have the opportunity to compete for jobs in the government service, is important in these ways:

- As citizens, Americans all want public-service jobs to be filled by employees who know how to do their work.
- As job seekers, Americans all want a fair chance to compete for jobs on an equal footing with other candidates.

The public-service career field offers meaningful work, as well as an opportunity to participate in the operations of government. High standards are set for public-service career people, upon whom the success of the federal, state, and local governments depends. Those students who are inspired to participate in government, and who measure up to these high standards, will find exciting and rewarding careers as government service employees.

STUDENT LEARNING ACTIVITIES

- Interview public-service workers in various federal, state, city, and local agencies to learn more about how they got their jobs.
- Obtain and study job announcements and job bulletins issued by federal, state, county, city, or local civil service offices and jurisdictions to learn about current job opportunities and specific job requirements.
- Set up a personal file of data and information needed to complete an application for work.
- Obtain and fill out various types of application forms for federal, city, county, and state employment, to develop skills in providing information requested.
- Obtain position classification descriptions, examination announcements, position listings, bulletins, application forms, and other materials and aids from civil service offices.
- Obtain copies of civil service study guides and civil service examination aids from a public library. Study the guides, and take sample tests to become acquainted with format of civil service examination questions.
- Take practice civil service examinations, and score and evaluate your own responses. Place special emphasis on discovering your areas of individual strengths and weaknesses.
- Actively participate in planned study programs designed to acquaint the student with various entrance requirements, test forms, and practices for filling civil service positions.
- Participate in a role playing exercise in a qualifications appraisal or oral interview situation, as a member of the

qualifications appraisal panel, and/or as a candidate for a civil service job.

- Observe interviews during role playing exercises to evaluate effectiveness of candidate's responses. Be prepared to discuss techniques used to overcome problems that develop.
- Listen to examples of interviews on tape, and be prepared to rate the candidate exclusively on information brought out during the interview, or on the candidate's observable behavior during the interview.
- Talk to your school guidance counselor or psychologist about your career choice.
- Consult the Dictionary of Occupational Titles and the Occupational Outlook Handbook about skills and the requirements of a variety of occupations in the public-service field.
- View films on how to apply for jobs, for example *Your Job - Applying for It*, *Job Interview - Whom Would You Hire?*, and *Your Job - Fitting In*.

TEACHER MANAGEMENT ACTIVITIES

- Plan on utilizing role playing exercises to acquaint students with communication skills in qualifications appraisal or oral interview situations.
- Arrange to have representatives of federal, state, county, and city civil service agencies and government offices visit the class and discuss career opportunities and application procedures.
- Provide opportunities for the school counselor or psychologist to discuss various considerations in arriving at occupational or career choice.
- Encourage students to adopt an exploratory attitude aimed at sharpening their awareness of job opportunities in the public-service career field.
- Collect samples of practice civil service test materials and publications and brochures available through civil service commissions and boards to discuss and review with students.
- Conduct simulated civil service tests under actual, timed testing conditions to provide students with test taking experiences.
- Have students score or evaluate their own responses and identify their individual strengths and weaknesses in basic verbal and math areas.
- Encourage students needing to improve their basic skills to enroll in special remedial courses or to perform self study, in order to increase their effectiveness in taking written civil service examinations.

- Obtain copies of various civil service bulletins and announcements. Discuss various job specifications in terms of general and specific education, experience, and hiring requirements.
- Utilize role playing exercises to acquaint students with the purposes and procedures of the qualifications appraisal or oral interview panel. Have students play both the role of the interview panel member (usually 2 or 3) and of the candidate.
- Prepare tapes of different employment interviews and play them for the class to discuss and evaluate.
- Encourage students to use all their senses as qualification panel members to carefully observe what is being communicated by the candidate in the interview.
- Show films on how to apply for a job, for example *Your Job - Applying for It, Job Interview - Whom Would You Hire?,* and *Your Job - Fitting In.*

RESOURCES

Dictionary of Occupational Titles, Volume I, Definitions of Titles, U. S. Government Printing Office, 1965.

Dictionary of Occupational Titles, Volume II, Occupational Classification, U. S. Government Printing Office, 1965.

Occupational Outlook Handbook, U. S. Government Printing office, 1972-73 Edition.

Working for the USA, Pamphlet #4, BRE-37, U. S. Civil Service Commission, 1972.

Federal Career Directory, U. S. Civil Service Commission, 1971.

Prepare Yourself for the Postal Examination, AN 2450-R, U. S. Civil Service Commission, 1969.

The following publications of the U. S. Civil Service Commission are available at the local Job Information Center:

Your First Job - A Key to Your Future, BRE-10

Go Government, BRE-14

Washington, D.C., Where the Action Is, BRE-17

Guide to Federal Career Literature, BRE-24

Employment of the Mentally Restored in Federal Service, BRE-6

Employment of the Mentally Retarded in Federal Service, BRE-7

Employment of the Handicapped in Federal Service, BRE-8

Accent on Youth, BRE-19

Orientation to Public Service Occupations, Career Education Curriculum Guide, California State Department of Education, U. S. Government Printing Office, 1973.

Your Job: Fitting In (Movie, 16mm reel, purchase), Coronet Films, 1969.

Your Job: Applying for It (Movie, 16mm reel, purchase), Coronet Films, 1969.

Job Interview: Whom Would You Hire? Ser. 2 (Movie, 16mm reel, purchase), Churchill Films, 1970.

Unit 9

TECHNIQUES OF DECISION MAKING

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Unit 9

TECHNIQUES OF DECISION MAKING

INSTRUCTIONAL OBJECTIVES

1. Ability to define decision making.
2. Ability to learn the decision-making formula.
3. Ability to learn how to state problems simply and accurately.
4. Ability to determine the difference between a symptom and a cause.
5. Ability to determine which facts are most important to a decision.
6. Ability to be able to qualify information according to importance and subject classification.
7. Ability to learn to identify two or more alternative solutions for a problem.
8. Ability to develop an openness to creative ideas.
9. Ability to learn to weigh the consequences of alternative decisions.
10. Ability to select and justify the most appropriate decision.

CONTENT

INTRODUCTION

Every person, each day, is faced by numerous situations which require the making of many decisions throughout the course of the day. It is necessary to answer such questions as: *When do I get up in the morning? What clothes will I wear? What will I have for breakfast? Which route will I take to school?*

Working in the field of public service, an individual is constantly faced with a series of situations which require him to take some particular course of action. Many such actions may not require special decision making on his part, because his particular organization has provided ways for him to make these decisions rather automatically. For example, there are department policies, and standard ways of performing certain jobs. A person also has his own past experiences of success which enable him to easily make certain decisions for such things as: the hours he should work, his rate of pay, and the required forms which must be completed for certain kinds of activities. All of these things are handled rather automatically on the job, because people have methods of handling certain things in certain ways. These become habit. They fit within a regular pattern.

There are many situations faced by a decision maker where the consequences of his action are so minor that it doesn't really matter which way he decides to solve a given problem as long as it is resolved: for example, what pencil to choose; the color of the paper on a final report; the diverting of automobiles during a traffic jam.

However, there are also other situations where the way a manager or supervisor solves a problem has great impact on an organization. Sometimes a person doesn't have a chance to actually know what is right and what is wrong. Judgment might have no well established basis. The opportunity to select between two alternatives of equal value does not exist. The situation is not clearcut. It requires thought and careful judgment; it has far-reaching consequences on the organization--affecting the quality of service, costs, schedules, the relationships between people in a working unit. Appropriate action must be taken in such assorted areas as overtime, employee dismissal, grievances, types of equipment to purchase, ways to reduce waste. The effectiveness and efficiency of the decision-making process of one individual can have far-reaching impact on a public-service organization.

Good decisions allow individuals to control and monitor their operations. Bad ones can cause worse problems and hinder the effectiveness of an organization. Things just don't happen by chance. They are made to happen. They are arranged. They can quite often be developed over a period of time which has been required by the nature of the problem or activity.

WHAT IS DECISION MAKING?

Decision making involves a conscious choice or selection of one behavior alternative from a group of two or more behavior alternatives.

Thus, there are two basic elements in a decision-making process: one, the matter of conscious choice, and the other of alternatives. *To decide, then, really means to cut off, to come to a conclusion, to end.*

A FORMULA FOR DECISION MAKING

Decision-making is a skill that can be developed. One way in which it can be developed is through a formula, a procedure which provides a formal process or system involving the basic rules of decision-making. There are no born decision makers, but some people appear to act very efficiently on the basis of hunches. These people may never be seen with charts and graphs, or performing a lot of analytical tasks. However, they've probably developed their own way of sifting facts and of solving problems. Good decision makers usually know their personnel; have prior experience; they can put together difficult possibilities quickly. They have their own personal *formulas* of decision making.

An effective technique to help make decisions is through the aid of a formula — a kind of check-off list to help find answers to difficult situations, to resolve problems, to handle unique situations. Such a formula enables one to take advantage of his past experiences, to see the whole picture, and to utilize all the facts he can find which are applicable to the solution.

A decision-making formula worthy of our consideration has six steps:

- *Isolate* - State the apparent problem or situation with which you plan to deal.
- *Analyze* - Gather the facts.
- *Diagnose* - Organize and interpret the facts.
- *Prescribe procedures* - State the real problem or situation.
- *Implement procedures* - Develop alternative solutions.
- *Evaluate* - Select the most appropriate alternative. Decide.

We will consider each of these steps separately. However, it should be kept in mind that these separate steps are really all related and part of the whole process of decision making.

Isolate the Problem. A problem can be a situation, question, matter, or person that is perplexing or difficult, that

obstructs the way to achieving a goal or objective.

Almost everyone has problems: students have study problems when they don't know answers to test questions; people have money problems when they can't pay all of their bills. Individuals have problems with people who are unfriendly; problems with their girlfriends or boyfriends; growth problems; health problems; psychological problems.

There are professionals and specialists to whom people can go with their problems. A person takes his malfunctioning car to a mechanic, he calls on the plumber to fix leaky pipes, contacts the doctor when he doesn't feel well. These specialists are skilled problem solvers in a particular area. They have had special training and experience. They may even have had to pass examinations to obtain certificates or licenses.

In decision making, one must recognize problems as well as symptoms of problems. It is particularly important to be able to separate symptoms from causes.

What is the Real Problem? Problems are often presented in very broad terms: "Gee, John, they've really fouled up in accounting. Go straighten them out." "Boy, do we have a morale problem." "We have to introduce that new system right away." "Those two managers just don't get along."

Consider the question of morale, for example. Is morale really the problem, or is it more accurately the symptom of another problem? Chances are that it is a symptom of a problem rather than the real problem itself. The problem situation might be poor organizational structure, bad working conditions, an unfriendly supervisor, unfair treatment, or a number of other difficulties.

To help in determining what is a symptom and what is a cause, several questions must be asked:

- *"How else might the problem be stated?"* The placement of accountants in one isolated department, without the opportunity to discuss actual income and outgo with supervisors, has given us unrealistic budget figures.

  The lack of adding machines, a broken calculator, dim light, uncomfortable room temperatures, and individual working spaces has caused a greater number of absences.

  The accounting manager has openly criticized senior staff members in front of their fellow workers.

  The department secretaries were all forced to work overtime for staying five minutes past their lunch hours.

- *"What else is involved?"*

  If there are no communications between accountants and supervisors, neither group will know the reasons behind the requests or needs of the others.

  There has been talk about a computer eliminating some of the accounting jobs.

  The senior accountants have been slow to pick up the new accounting procedures.

  This is the tenth time this month that the financial unit has been unable to take care of the people in line because the secretaries were not here.

- *"Are there similar problems in other departments?"*

  The people in supplies have been ordering the wrong equipment.

  There have been layoffs in several departments.

  Several department managers are competing for the job of assistant director of our organization.

  None of the other departments have problems with secretaries.

- *"Is this a problem or a symptom?"*

  The real problem is that the accountants have not been properly informed of the organizational structure, and thus have very poor understanding of the departments which comprise the organization.

  Another organization nearby has announced opportunities for accountants at higher pay, and in new offices.

  The accounting manager and his senior staff do not plan departmental modifications together.

  Only one of the secretaries has a watch and it is five minutes slow. They play bridge at lunch time several days each month.

- *"How do others perceive the problem?"*

  Talk to all the accountants and managers individually.

  Talk to personnel about accounting re-classification.

  Interview the senior staff.

Visit with the secretaries.

What are the Problems? What are the Symptoms? If your automobile won't start, it might not be because it's old, the engine is dirty, or your windshield wipers don't work — the car may be out of gas. It might, however, be time to give it some other attention, too. If you can recognize the symptoms, you can avoid a lot of problems.

Analyze the Facts. When the problem is recognized, then all the facts required for a successful decision can, and should be accumulated. Too often, people think they have all the facts, but they don't. It's like trying to put together a jigsaw puzzle, and recognizing, after many frustrating hours, that six pieces are missing.

Frequently, the decision maker feels that because he is in a particular situation, he knows it better than anyone else can know it. The issue may, therefore, be somewhat clouded. This cloudiness may prevent him from seeing what is actually there.

How many times have individuals had to make a decision and found that they didn't have the right facts or sufficient quantities of facts to insure a good decision? Both the quality and effectiveness of most decisions can be seriously reduced without good facts.

When gathering facts, one should write them down, and gather them into one comprehensive list. The decision maker can then visualize them all at the same time, and is much less likely to overlook or forget any of them. In dealing with large amounts of information, he can grade sub-topics and keep track of them in a systematic way.

How many facts should be gathered? The number usually depends on the nature and complexity of the situation.

Basically it means that the amount of information accumulated depends upon such factors as:

- The amount of time available.
- Is it an emergency situation or not?
- The seriousness of the situation.
- The availability of information, etc.

Where are the Needed Facts Obtained?

- First, he might turn to available records. He usually has financial records, personal records, records of transactions, and records of activities.

- Second, he may have references: newspapers, journals, old letters, the like.

- Third, and very importantly, he has other people, or he has a staff. There is a great deal of expertise within most public-service organizations: specialists in economics, human relations, law, health, safety, and other areas; all responsive to the request of the decision-maker. An outside expert, or consultant, may be required in difficult situations.

- Finally, look at other organizational units which have been confronted with similar problems. Quite often, through investigation, the decision-maker finds that precedents have been set which he may have to follow. In law, for example, he may have to base a decision on the verdict of a case held on the same issue, long ago in a distant place.

Sources of information are unlimited. It takes a great deal of initiative to uncover them.

How should the facts be obtained? Here again, there are questions we must ask ourselves:

- What kinds of facts are available?

- What information is available?

- Is there enough?

- Is help needed, and where can it be obtained?

- Who else might have the information needed?

Going back to the morale problem, which was found to be the result of a basic lack of communication between accountants and departmental managers, how might the decision-maker proceed?

In gathering the facts, he would have to obtain both the accountant's records and the manager's records. The decision-maker might call upon organizations of similar size and activity, to see how they handle difficulties of this nature. He might talk to one or more senior accountants in a large public accounting firm or contact the governmental auditors. He might even write letters to colleagues seeking their advice.

The decision-maker might hold a meeting of selected members of his staff, or assign a task force of accountants and managers to look into the matter.

As he begins to gather his facts, the decision-maker will discover that other information is required. Additionally, he will uncover sources of other facts. The quality of the facts he gathers ultimately affects the quality of his decisions. The better the data, the better the opportunity to make a good decision.

Organizing the Facts. Once the facts have been collected, it becomes very important that they be organized to help the decision-maker interpret what they really mean. To do this, it's helpful to set them up in categories -- to pull like items together.

This procedure helps people to know whether certain facts are more important than others, and thus deserve special consideration.

Grouping the Facts. There are several categories into which information can be grouped, such as: cost, time, past precedent, procedures, leadership, quality, and productivity:

Cost. In cost considerations, one must look at unit costs, personnel costs, material costs, equipment costs, mailing costs, etc. If, for example, an individual is attempting to determine the cost of mailing out new contracts to several hundred vendors with whom the agency deals, the following costs may have to be considered, among others:

- Duplication costs per duplicated copy.
- Salary costs of writing new contract.
- Salary costs of typing contracts.
- Costs of new contract forms.
- Costs of envelopes.
- Costs of writing departmental letters.

Time. Time is usually calculated in terms of the personnel costs or salaries paid. The basic periods of time — hours, days, weeks, months, years — are quite often combined in terms of man-hours, man-weeks, man-years, etc., to enable the numbers of hour units to be multiplied by salary allocations. Equipment time, particularly in this age of computers, can be quite expensive.

Past Precedent. This is a category relating together data on similar situations in the past, and to consider the decisions arrived at in those situations for their bearing on the decision to be made in the present.

Procedures. These are also important. Most public-service organizations have certain ways of accomplishing functions or providing services. They have been proven over a period of time to be most appropriate to particular situations. Here, too, is where organizational policy making may be involved and possibly changed and modified.

Leadership. This would include the directions and decisions which brought about a particular situation, and permit review of the factors which were present when prior decisions were made.

Quality. The quality of facts is important. There must be an assurance that the right data, and the most applicable figures and information, are available.

Productivity. This category would enable a comparison between various activities which would bring about particular results. It would provide an opportunity to look at the output of a department or project team.

In pulling together like items, one can see trends, certain facts which may be more important than others, and areas where there are gaps in the information.

In organizing facts, the following questions should be asked:

- Which facts are related to each other?
- Are these facts related to any not listed?
- What is the extent of their relationship?
- Are they relevant to this situation?
- What is the level of reliability of the facts?
- Can the problem be more clearly defined with the information listed?
- How can it be done?
- How much time is there for further organization?
- Are these facts recurring or one time events?

<u>Stating the Real Problem</u>. Having examined the data, the

decision-maker is now in a position to state the *real* problem or situation with which he has to deal. He now knows whether he has a problem, or just a misunderstanding. Was the original statement just a symptom, or was it a real situation? It might be that there are several problems. Whatever the situation, it must be stated in clear and simple terms. It should be written down.

A problem is a situation which deviates from an expected standard, or norm of desired performance. In decision making, one starts with an *apparent* problem. The decision maker gathers more information in order to more accurately identify the situation with which he is going to deal.

Is there a real problem? or just symptoms? The data have been gathered and organized. Now it is necessary to zero in on the actual situation, and to see whether there is a real problem. Was the initial identification a symptom of a problem, or was it a real cause? Is there one problem, or several?

If the decision-maker neglected to gather the facts, and then to organize, analyze, and categorize them, he might find himself working on the wrong situation. He could spend a great deal of time and effort on symptoms, and could actually be working on the wrong problem. Certainly, he could overlook a number of relevant factors.

If a medical doctor spent all of his time studying symptoms, he might be too late to address an actual problem and his patient could die. Similarly, in a public-service organization, *if too much time and energy is spent in chasing symptoms instead of causes, problems can become crises.*

What objective is to be achieved? Remember, one must still think about decision making in terms of fulfilling objectives.

When it is known what kind of performance should be achieved, and what kind of performance has been received, the necessary effort is simple — merely to measure the difference between those two points. The decision-maker must identify the deviation and its extent. He will also have to specifically state the standard, or *norm*, toward which he is trying to return.

In other words, not only does he have to state the problem to which he is going to address himself, but he must specifically state the objective he wants to achieve.

In the previous illustration of the public-service organization and the communication problems between the accountants

and managers, the objectives could, perhaps, be restated in this manner: *it is necessary to design a realistic and accurate budget for costs.*

This stage would complete the problem identification part of the decision-making process. Now, he can get on with decision-making itself.

Developing Alternative Solutions. With the real problem determined and stated, the decision-maker is now in a position to begin the development of alternative solutions. Notice that there is an "s" on the end of "solution." Decision-makers should be interested in as many solutions to a problem as can be developed.

This particular phase of the decision making process should be very free-wheeling. It should produce a number of ideas. The decision-maker should keep his mind open. He should not be too judgmental, but should avoid premature criticism. *Criticism given too early can destroy new ideas that could be beneficial.*

Picture a staff meeting, where the assistant director of the agency presents an entirely new approach to providing recreational opportunities for senior citizens. He is interrupted by his superior, the director, who tells him that his idea is ridiculous. It is unlikely that he would ever bring up the subject again unless he were extremely persistent and unafraid of the director. *Creative thinking can be squelched by a superior who criticizes without having much of a basis for criticism.*

The number of alternatives that can be developed at any one point in time is a function of how much time is spent in developing these alternatives. It's always helpful to stop and ask: "If I didn't have any rules to follow in this organization, would I handle the situation any differently?" Or, "What else could I do?" Perhaps it is desirable to modify several previously stated alternatives to produce one better alternative.

Present all alternatives for consideration. By considering all ideas as initially feasible, they can be brought out into the open. Such occasions are often called *brain storming* sessions. Regardless of how silly an idea might seem at first, perhaps when it is considered in the light of other possibilities it may turn out to be a fairly useable solution; or maybe a portion of that idea might be able to be combined with another idea and thereby produce the ultimate solution.

What, for example, would have happened if someone stifled the

idea of the paper clip? "Isn't that stupid, who'd want to hold pieces of paper together with bent up wire?" Evidently, people laughed at Columbus, and his idea of a round world; they laughed at John Fulton and his steamship; and even at a young man named Fosbury, who high-jumped backwards. Regardless of ridicule, however, each of these men, in his solution to the problem at hand, succeeded in his particular project.

How many people have been shot-down in creative projects, by comments such as these: "We've tried it and it didn't work," "That's against policy," "It would cost too much," "He hasn't got the experience," "He's too young."

List the Alternatives. Looking at the positive side of the argument, there should be positive consideration of all methods, objects, and persons available, to satisfy the needs of decision-making. Once again, write down all of the alternatives, so that they can be comprehensively considered.

To do this, one can list all of the alternatives across the top of a chart and then systematically consider all the factors under each alternative. This chart, or *matrix*, as it is called, can then be used to evaluate the best solution.

As an example, let us assume legislation is passed in each state to award home and business loans and educational benefits to veterans of the Vietnam war. Then a matrix somewhat like this can be made:

ALTERNATIVES

	#1	#2	#3	#4	#5
Staff involved					
Labor costs					
Material costs					
Equipment costs					
Services included					
Services excluded					
Facilities needed					
Number of veterans processed per day					
Publicity requirements					
Applicable policy					
New policies needed,					
etc.					

The list can be long, but it is well worth it. If, for example, one is considering attending a community college or university, but can't make up his mind. He can develop a chart with all of the things that are important to him on the side of the chart, and the schools under consideration across

the top. Then a five-point scale can be applied to each item, with five being the highest mark and zero the lowest. The school with the most points might be the most likely alternative under all the prevailing circumstances. Still, one cannot be completely definite on this basis alone, so it is necessary to move to the next step in the decision-making process, that of selection.

Selecting the Best Alternative Solution. The most important part of the decision-making process is the selection of the most appropriate alternative: *deciding*. This is the stage during which criticism is appropriate. Judgment must be made on all facets of the problem and the alternative solutions. The effectiveness of each of the solutions must be evaluated in terms of the objectives towards which the decision-maker is oriented. He must look carefully at, and criticize severely, such items as cost, timeliness, workability, acceptability, and implementation.

- Can the solution be made to work?
- Will the staff cooperate?
- Will those who are served make the necessary adjustments?
- Are there the skills in the organization to carry out the program?

List the Consequences of the Decision. As these and other items are considered, it is desirable to write down all of the consequences of each of the decisions. List the pro's and con's. It is not enough to add them together and make a decision on that basis, such as in the selection of a college, in the previous section. Not only does one use some type of scale, but he assigns different weights to different items. Using the previous college selection chart, the decision-maker might have to weight costs higher than the availability of co-educational dormitories, or the scholastic reputation of the school over the strength of its football team.

Be a Devil's Advocate. The more desirable alternatives should be scrutinized in a negative way. Take the opposite position, that is, play the *devil's advocate*. Mentally implement the plan and consider the adverse consequences.

Take one of the most favorable-looking alternatives. Ask:

- "Will it affect other departments?"
- "What could go wrong?"
- "What are the potential sources of breakdown?"

- "What new problem might it create?"

- "Where would the resistance be?"

Consider the extent to which these consequences will probably come about and the degree of seriousness of each one. Select second and even third choices in order to plan for contingencies.

Scrutinize the Final Alternative Thoroughly. Once the alternatives have been narrowed to only one, which appears to fill the need, then this one alternative should be subjected to one final round of positive questions:

- Will this decision fulfill the original goal?

- Can the agency live with the decision permanently?

- Is the timing of the decision right?

- Does the decision bring about the greatest benefit for the greatest number?

Involve Your Superiors. It is often necessary and desirable to go to the superiors with the decision. Ordinarily, the problem would be presented, with the attendant factors affecting it, and the alternative solutions which could resolve it. Then the decision-maker would indicate his reasons, with their consequences, for selection of the particular alternative.

Implement the Decision. After a decision is made, it must be implemented. The necessary steps must be initiated to carry it out. The whole management cycle of planning, organizing, and controlling must be brought into action, as well as other available management tools.

SUMMATION

No phase of the management cycle or any other organizational function could be carried out if decisions were not made. Planning, organizing, controlling, as well as motivating, communicating, and setting standards; these all require endless strings of decisions or choices. This is why the final process of decision making is so important.

Good decisions are the result of understanding responsibilities, involving others, knowing the organization, understanding one's own strengths and weaknesses, and being accountable for decisions made.

In understanding the responsibilities involved, one must know where to get information and be cognizant of the extent to which people can take action.

Through involving others, they gain a sense of ownership in the decision, and become more committed. They remove their defense mechanisms.

Knowing an organization requires an awareness of its organizational history and objectives, where the power centers lie, the limits of one's authority, and the way in which work is actually accomplished.

One's understanding of himself and his own shortcomings insures that he will seek out expertise he does not possess himself, and will develop ways to improve his own skills.

The individual should have this motto: *Remember, when you get right down to it, one person may have to decide - YOU!*

STUDENT LEARNING ACTIVITIES

- Prepare a definition of *decision making.*
- Write a brief paper on the decision-making formula.
- Participate in a class discussion about decision making in a selected public-service agency. Try to identify top, middle, and low-level decisions.
- Prepare a definition of the term *problem.*
- Interview a public-service official to identify a problem within his organization. Follow with a class discussion.
- Prepare a brief paper describing three examples of symptoms and their causes.
- Participate in a problem-solving case study.
- Write a brief paper on why facts must be gathered to aid in the decision-making process.
- Identify the kinds of facts and resources you must use to prepare for making decisions about a teacher-assigned topic.
- Participate in a discussion about fact finding.
- Develop with the class, and have at least 20 students complete, a survey questionnaire with open-ended questions on ways in which your school can be improved. Organize responses according to subject and year ranking of importance.

- Participate in a class discussion on the results of the questionnaire survey.

- After the class has decided on one or more ways in which the school can be improved, prepare a report on one of the objectives including:

  statement of an objective,

  facts needed and how obtained,

  categorizing the facts.

- Deliver an oral version of your report. Respond to questions and comments from the class.

- Choose five articles from the newspaper on five different topics: sports, politics, crime, etc. State the actual problem being addressed.

- Participate in a class discussion about problem identification, and problem statements. Sharpen your problem statements if necessary.

- Participate in a class discussion about problems identified and possible alternative solutions.

- Using the example of the State legislature passing a bill awarding home and business loans and educational benefits to veterans of the Vietnam War, develop a set of alternative plans as to how the legislation may be carried out.

TEACHER MANAGEMENT ACTIVITIES

- Have students define *decision making*.

- Assign students a paper on the decision-making formula.

- Conduct a class discussion about decision-making in a selected public service agency.

- Have students prepare their own definitions of the term *problem*.

- Assign students interviews with public-service officials to identify selected organizational problems.

- Conduct a class discussion on problems in public-service organizations.

- Have students develop and discuss reports and three examples of symptoms and their causes.

- Select and assign a case study to the class in problem solving.

- Assign a paper on why facts must be gathered to aid in the decision-making process.

- Prepare a list of considerations in several public-service agencies. Have each student select one consideration around which he will gather essential facts to make a decision.

- Conduct a discussion on fact finding.

- Assign the class a survey project, entitled "How Can Our School be Improved?" Have students develop their own questionnaire and administer it to at least 20 students. Ask them to organize their results according to subject and rank of importance.

- Organize a class discussion on the results of the surveys.

- Once one or more items of possible school improvement have been agreed upon, assign the students a report to contain the following:

  statement of an objective,

  facts needed and how obtained,

  categorizing of facts.

- Organize oral presentations of student reports.

- Assign students the reading of five articles from a newspaper on five different topics: sports, politics, crime, etc. Have them state the actual problem being discussed.

- Conduct a class discussion on problem identification and problem statements.

- Assign a brief paper on the symptoms of five problems and the causes in a public service agency selected by each student.

- Conduct a class discussion on the problems and solutions identified.

- Using the example of the new bill for veterans of the Vietnam War, have students develop a set of alternatives.

- Insure that the students are open to new and abstract suggestions.

- Direct oral presentations of students in which they review their original problems, the sources and categories of facts, the alternatives available for solution, their respective consequences, and their ultimate decisions. Have students challenge one another's decisions.

RESOURCES

Power of Decision, R. C. Barker, Dodd, Mead & Co., 1968.

Models for Decision, C. M. Berners-Lee, Gordon Publishers, 1969.

Executive Decision Making: Modern Concepts and Techniques, R. S. Davar, International Publications Service, 1968.

Administrative Strategy and Decision Making, C. T. Hardwick and F. Landuyt, Southwest Publications, 1966.

Ideas About Choosing, J. Mayer and S. Symmes, Watts, Franklin, Inc., 1969.

Management Decision Making, R. M. Cyert and L. A. Welsch (eds), Penguin Books, Inc., 1971.

Management Decision Making Under Uncertainty, T. Dyckman, et. al., Macmillan Company, 1969.

Organizational Decision Making, F. A. Shull, et. al., McGraw-Hill and Company, 1970.

Simulation Gaming for Management Development, L. McKenney, Harvard Business School, 1967.

Organizational Decision Making, Alexis and C. Wilson, Prentice Hall, 1967.

Statistical Analysis for Managerial Decisions, J. C. Boot and E. B. Cox, McGraw-Hill, 1970.

How to Manage and Use Technical Information, H. Doyle, Jr., Cahners Publishing Co., 1968.

Management Reporting Systems, J. M. McKeever, John Wiley & Sons, 1971.

Financial Analysis for Decision Making, C. J. Bieke, Prentice Hall, 1966.

Decision Making, W. Edwards and A. Tuersky (editors), Penguin Books, Inc., 1972.

Cost-Effectiveness, J. M. English, John Wiley & Sons, 1968.

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Management Decision Making Under Uncertainty, T. Dyckman, et. al., Macmillan Company, 1969.

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Simulation Gaming for Management Development, L. McKenney, Harvard Business School, 1967.

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Statistical Analysis for Managerial Decisions, J. C. Boot and E. B. Cox, McGraw-Hill, 1970.

How to Manage and Use Technical Information, H. Doyle, Jr., Cahners Publishing Co., 1968.

Management Reporting Systems, J. M. McKeever, John Wiley & Sons, 1971.

Financial Analysis for Decision Making, C. J. Bieke, Prentice Hall, 1966.

Decision Making, W. Edwards and A. Tuersky (editors), Penguin Books, Inc., 1972.

Cost-Effectiveness, J. M. English, John Wiley & Sons, 1968.

Effective Leadership, (film), UC Extension Media Center, 1967.

New Decision Making Tools for Managers, New American Library, 1971.

Decision Making, International Publications Service, 1967.

Optimal Decisions, O. Lange, Pergamon Press, Inc., 1972.

Small City Government: Seven Cases in Decision Making, E. Mills and H. R. David, Random House, 1962.

A Study of Community Decision Making, A. Schaffer and R. C. Woodruff, University of North Carolina Press, 1970.

Argumentation and Debate: Rational Decision Making, A. J. Freeley, Wadsworth Publications, 1971.

Decision-Making in Poverty Programs: Case Studies from Youth Agencies, M. Herman and M. Mink, Columbia University Press, 1968.

Decision Theory and Human Behavior, Wayne Lee, John Wiley & Sons, 1971.

Professional Decision-Making: A Procedure for Evaluating Complex Alternatives, J. R. Miller, Praeger Publishers, Inc., 1969.

Community Decision-Making for Education, National Education Association, Press-Radio-Television Relations Division, 1969.

Judgment in Administration, Ray E. Brown, McGraw-Hill, 1966.

Making Management Decision, Emory and P. Niland, Houghton Mifflin, 1968.

Decision-Making and Vocational Development, E. L. Herr, Houghton Mifflin, 1972.

Management Decisions by Objectives, G. Odiorne, Prentice-Hall, 1972.

Decision, American Oil Co., Dan Hess Production, 1968.

Appendix A

RESOURCE SUPPLIERS

Appendix A

RESOURCE SUPPLIERS

This appendix is a listing of suppliers of resources itemized at the end of each unit of the individual sections.

ABC - TV
Associate Jules Power Productions
1330 Avenue of the Americas
New York, N.Y. 10019

Addison-Wesley Publishing Co.
Reading, Massachusetts 01867

Alba House
c/o St. Paul Publications
2187 Victory Boulevard
Staten Island, N.Y. 10314

Aldine Publishing Company
529 South Wabash Avenue
Chicago, Illinois 60605

Allyn and Bacon
470 Atlantic Avenue
Boston, Massachusetts 02210

American Elsevier Publishing Co.
52 Vanderbilt Avenue
New York, N.Y. 10017

American Institutes for Research
135 North Bellefield
Pittsburg, Pennsylvania 15213

American Management Association
135 West 50th Street
New York, N.Y. 10020

American Oil Company
910 South Michigan
Chicago, Illinois 60680

Appleton-Century-Crofts
440 Park Avenue South
New York, N.Y. 10016

Armour Company
c/o John Sutherland Productions
401 North Wabash
Chicago, Illinois 60611

Association Films
600 Madison Avenue
New York, N.Y. 10022

AV - ED Films
7934 Santa Monica Boulevard
Hollywood, California 90046

Avon Educational Services
c/o Association Films
600 Madison Avenue
New York, N.Y. 10022

Bantam Books
School and Marketing Division
666 Fifth Avenue
New York, N.Y. 10019

Barnes & Noble
105 Fifth Avenue
New York, N.Y. 10003

Basic Books Publications
404 Park Avenue South
New York, N.Y. 10016

Norman Bean
75 West Taxco Port
Simi, California 93065

Bellman Publishing Company
Box 172
Cambridge, Massachusetts 02138

Bobbs-Merrill Company
Subsidiary, Howard W. Sams & Co.
4300 West 62nd Street
Indianapolis, Indiana 46268

Brandon Films
221 West 57 Street
New York, N.Y. 10019

Brown, William C., Company
135 South Locust Street
Dubuque, Iowa 52001

Bureau of Audio-Visual Instruction
University of Wisconsin
1312 West Johnson Street
Madison, Wisconsin 53706

Cahners Publishing Company
221 Columbus Avenue
Boston, Massachusetts 02116

Churchill Films
6671 Sunset Boulevard
Los Angeles, California 90028

College Entrance Book Examining Board
Public Order Office
Box 592
Princeton, New Jersey 08540

Columbia University Press
562 West 113 Street
New York, N.Y. 10025

Connecticut Mutual Insurance
c/o Association Films, Inc.
600 Madison Avenue
New York, N.Y. 10022

Coronet Instructional Films
65 E. South Water Street
Chicago, Illinois 60601

Creative Visuals
Box 1911
Big Spring, Texas 79720

Crown Publishers
419 Park Avenue South
New York, N.Y. 10016

Curriculum Materials Corporation
1319 Vine Street
Philadelphia, Pennsylvania 19107

De Rochemont, Louis, Associates
225 East 46th Street
New York, N.Y. 10017

Dodd, Mead & Company
79 Madison Avenue
New York, N.Y. 10016

Doubleday and Company
501 Franklin Avenue
Garden City, N.Y. 11531

Educational Systems Development
Box 457
Royal Oak, Michigan 48068

Encyclopedia Britannica
425 North Michigan Avenue
Chicago, Illinois 60611

Evan, M., and Company
East Washington Square
Philadelphia, Pennsylvania 19105

Fearon Publishers
2165 Park Boulevard
Palo Alto, California 94306

Ferguson, J. C., Publishing Company
6 North Michigan Avenue
Chicago, Illinois 60602

Filmstrip House
432 Park Avenue South
New York, N.Y. 10016

Free Press
c/o Macmillan Company
866 Third Avenue
New York, N.Y. 10022

Glencoe Press
c/o Macmillan Company
866 Third Avenue
New York, N.Y. 10022

Globe Book Company
175 Fifth Avenue
New York, N.Y. 10010

Gordon Publishers
Box 459, Bowling Green Station
New York, N.Y. 10004

Grove Press
53 East 11th Street
New York, N.Y. 10003

Gryphon Press
220 Montgomery Street
Highland Park, New Jersey 08904

Hale, E. M., and Company Publishers
1201 South Hastings Way
Eau Claire, Wisconsin 54701

Harcourt Brace Jovanovich
757 Third Avenue
New York, N.Y. 10017

Harper and Row Publishers
College Department
49 East 33rd Street
New York, N.Y. 10016

Harvard University Graduate School
School Business Administration
Soldiers Field
Boston, Massachusetts 02163

Harvard University Press
79 Garden Street
Cambridge, Massachusetts 02138

Hawthorn Books
70 Fifth Avenue
New York, N.Y. 10011

Holt, Rinehart, and Winston
383 Madison Avenue
New York, N.Y. 10022

Home Economics Education Association
c/o National Education Association
of the United States
Publication-Sales Section
1201 16th Street, Northwest
Washington, D.C. 10036

Houghton Mifflin Company
110 Tremont Street
Boston, Massachusetts 02107

Imperial International Learning
247 West Court Street
Kankakee, Illinois 60901

Indiana University Audio-Visual
Center
Field Services Department
Bloomington, Indiana 47401

Instructional Materials Laboratory
University of Texas
Austin, Texas

International Publications Service
114 E. 32nd Street
New York, N.Y. 10016

International Universities Press
239 Park Avenue S
New York, N.Y. 10003

Iowa Center for Education in
Politics
University of Iowa
AV Center
Iowa City, Iowa 52240

Irwin-Dorsey Press
1818 Ridge Road
Homewood, Illinois 60430

Krieger, R. E., Publishing Company
P. O. Box 542
Huntington, N.Y. 11743

Laidlaw Brothers
Division of Doubleday & Co.
Thatcher and Madison Streets
River Forest, Illinois 60305

Lippincott, J. B., Company
East Washington Square
Philadelphia, Pennsylvania 19105

Longmans, Green Publishing
48 Grosvenor Street
London W 1, England

Louisville Public Schools
Division of Curriculum
Louisville, Kentucky 40201

Lyons and Carnahan-Educational
Publishers
407 East 25th Street
Chicago, Illinois 60616

Macmillan Company
866 Third Avenue
New York, N.Y. 10022

Metromedia Analearn
235 Park Avenue
New York, N.Y. 10003

McCall's Pattern Company
230 Park Avenue
New York, N.Y. 10017

McGraw-Hill Book Company
330 West 42nd Street
New York, N.Y. 10036

McKay, David, Company
750 Third Avenue
New York, N.Y. 10036

NASCO
Fort Atkinson, Wisconsin 53538

National Council of Teachers
of English
1111 Kenyon Road
Urbana, Illinois 61801

National Education Association of
the United States
Publication-Sales Section
1201 16th Street, Northwest
Washington, D.C. 10036

National Laboratory for Higher
Education
Durham, North Carolina 27707

National Recreation & Parks
Association
1700 Pennsylvania Avenue, Northwest
Washington, D.C. 20006

New America Library
1301 Avenue of the Americas
New York, N.Y. 10019

Noble and Noble Publishers
750 Third Avenue
New York, N.Y. 10017

Northwestern University Press
1735 Benson Avenue
Evanston, Illinois 60201

Norton Company
Audio Visual Services
New Bond Street
Worcester, Massachusetts 01606

Odyssey Press
4300 W. 62nd Street
Indianapolis, Indiana 46268

Pendell Publishing Company
Box 1660
Midland, Michigan 48640

Penguin Books
7110 Ambassador Road
Baltimore, Maryland 21207

Penney, J. C., Company
1301 Avenue of the Americas
New York, N.Y. 10019

Pergamon Press
Maxwell House, Fairview Park
Elmsford, N.Y. 10523

Personal Products Company
Education Department
Mill Town, New Jersey 08850

Pitman Publishing Corporation
20 East 46th Street
New York, N.Y. 10017

Praeger Publishers
Subsidiary, Encyclopaedia Britannica
111 Fourth Avenue
New York, N.Y. 10003

Prentice-Hall
Englewood Cliffs, New Jersey 07632

Putnam's, G. P., Sons
200 Madison Avenue
New York, N.Y. 10016

Random House
The College Department
201 East 50th Street
New York, N.Y. 10022

Reader's Digest Services
Educational Division
Pleasantville, N.Y. 10570

Science Research Associates
259 East Erie Street
Chicago, Illinois 60611

Scott Paper Company
c/o Modern Talking Picture
1212 Avenue of the Americas
New York, N.Y. 10036

Sears, Roebuck and Company
Publications Department
925 Homan Avenue
Chicago, Illinois 60607

Serina Press
70 Kennedy Street
Alexandria, Virginia 22305

Shoe String Press
995 Sherman Avenue
Hamden, Connecticut 06514

Simplicity Pattern Company
Education Department
200 Madison Avenue
New York, N.Y. 10016

Smith, Peter, Publisher
6 Lexington Avenue
Gloucester, Maryland 01930

Society for Visual Education
1345 Diversey Parkway
Chicago, Illinois 60614

South-Western Publishing Company
5101 Madison Road
Cincinnati, Ohio 45227

Springer Publishing Company
200 Park Avenue S
New York, N.Y. 10003

Stanford University Press
Stanford, California 94305

Sterling Educational Films
241 East 34th Street
New York, N.Y. 10016

Sutherland, John, Productions
401 North Wabash
Chicago, Illinois 60611

Teachers College Press
Bureau of Publications
Columbia University
1234 Amsterdam Avenue
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Appendix **B**

SUGGESTED EVALUATION QUESTIONS FOR PRE- AND POST-TESTS

Introduction

These tests are keyed to the Common Core guide of the Public Service Occupations curriculum.

The Common Core guide includes the following units:

Unit 1 — Oral Communications
Unit 2 — Written Communications
Unit 3 — Basic Report Writing
Unit 4 — Basic Record Keeping
Unit 5 — Good Grooming
Unit 6 — Relationships With Other People
Unit 7 — Interviewing Skills
Unit 8 — Applying For Public Service Jobs
Unit 9 — Techniques Of Decision Making

These tests were developed to help teachers:

(1) measure student learning gain.
(2) determine if the instructional objectives have been met.

Test Contents

Any evaluation of student learning should adhere closely to the intended outcomes expressed in the written objectives. Therefore, each test is based on the specific instructional objectives found in its corresponding unit in the Orientation guide. Every item of each test is directly associated with one of the objectives found in the guide for that unit.

These tests are structured to help determine whether the student has become competent or not in each unit. The items for each test relate only to the instructional objectives found at the beginning of that unit in the guide. No test items refer to material found in previous or later units. Consequently, each unit in the teacher's guide and its corresponding test can be used independently.

The evaluative approach used in these tests is not designed to measure the relative standing of each student to an actual or hypothetical population. Rather, it is designed to report a student's performance solely in terms of objectives mastered or not mastered. Each student can reach or exceed the minimum performance standard or criterion. Hence, this testing is called criterion referenced testing.

Directions

The tests have been prepared as master copies which may be duplicated for student distribution.

There is a separate test for each unit of instruction in the curriculum guide. For example, test number one can be used as a pretest and a post-test with the content in Common Core Services Unit 1 — Oral Communications.

Because each class is unique, instructors may add or delete any test items desired.

These tests have been given under nearly every conceivable condition, formal group testing, informal individual sessions, and "take home" tests. In so far as can be determined, satisfactory results were obtained under every condition.

In response to the demand for a system that is easy to use, a convenient answer key for each test has been included in this folder.

The tests provide an objective method for determining student learning gain, while freeing teachers to use valuable time for instruction.

Validity

The validity of any test must be determined in reference to the particular use for which the test is being considered. As these tests are essentially measures of student achievement, they must have content validity. Content validity involves the systematic examination of the test content to insure that it covers a representative sample of the behavior domain to be measured. By employing questions that directly relate to the instructional objectives in each unit, content validity is insured.

An experimental edition of this test was field tested in twelve schools, which were selected on the basis of size of school and community. Over 1,000 secondary school students were involved in the validation testing. Socio-economic groups taking the test ranged from the disadvantaged to upper middle-class. The schools were also selected to gain a student population from urban, suburban, and rural areas. In each of the schools, the teacher first gave the students a pretest before the content was introduced. The same testing instrument was used as a post-test. The objectives were to measure student learning which took place as a result of studying the material in the instructional unit, and to establish criterion referenced tests for use by schools throughout the country. For this purpose, a percentage passing of 70 percent or above on the post-test was considered to be an acceptable criterion mastery for that unit. No norms were established for these tests. It is suggested that each student be able to successfully pass 70 percent of the questions for each instructional unit that he is tested on. During this field test, suggestions for improving these tests were also made. The criterion referenced tests in this booklet are based on the pretest and post-test material used in this validation study.

Other Means of Evaluation

It should be remembered that the instructor can use a wide assortment of test situations to evaluate students.

Students can be rated on five-minute speeches which inform, instruct, persuade, motivate, or entertain.

Students can be grouped into pairs to simulate the interviewer and the interviewee. The interviewing sessions can pertain to employment, counseling, or job performance.

Instructors can tape record meetings and ask students to write the minutes of the meeting they have heard.

Students can be evaluated on their ability to write business letters, news releases, semi-formal, formal, and informal reports.

Each student can be given a group of papers to be filed alphabetically, numerically, by subject, location, or by the Dewey Decimal System.

The instructor may wish to determine interpersonal relationships by dividing the class into pairs and having each pair simulate the roles of superior and subordinate in a governmental agency.

An oral interview panel can be formed, with each student rated on their performance before the panel.

These methods can be used to complement the tests

Acknowledgements

The Public Service Occupations tests were developed and field tested in twelve locations. While many people were involved in this project, the staff is particularly indebted to the following people:

Lillian Avery,	Test Research Center Los Angeles, CA
Victor Backstrom,	Long Beach Unified School District Long Beach, CA
Dr. William E. Burns,	State University of New York Buffalo, New York
William Crane,	San Diego Unified School District San Diego, CA
Thomas Franklin,	San Diego Unified School District San Diego, CA
Gilbert Garcia,	Sacramento City Unified School District Sacramento, CA
Lt. Charles Kane,	San Leandro Police Department San Leandro, CA
Dr. Nellie M. Love,	Sweet Home Central School District Amherst, New York
James B. Mayo,	Fremont Unified School District Fremont, CA
Myron Nadolski,	Grant Joint Union School District Sacramento, CA
Nadine L. Reed,	San Diego Unified School District San Diego, CA
James J. Reilley, S.J.,	Canisius High School Buffalo, New York
Rosalia Salinas,	San Diego Unified School District San Diego, CA
Paul E. Sugg,	Williamsville Central Schools Williamsville, New York
Tom Schrodi,	Orange Unified School District Orange, CA
Thea Stitum,	Sacramento City Unified School District Sacramento, CA

Project Staff

Patrick J. Weagraff, Ed. D., Project Director

James J. Lynn, Curriculum Specialist

Constance F. Gipson
Assistant Curriculum Specialist

Harold M. Blue, Senior Editor

Lillian Deger, Typist

Miriam Dong, Typist

Preparing for Public Service Occupations

Evaluation Questions

1

Unit 1 Oral Communications

1. Effective speakers have voices that:
- A. Have a pleasant pitch and volume ____
- B. Lack variety of pitch ____
- C. Have great volume ____
- D. Have a very high pitch ____

2. A competent speaker would:
- A. Look at the people in the front row ____
- B. Look at the people in the back row ____
- C. Look at all the people in the group ____
- D. Look at the people in the middle of the group ____

3. Looking at the audience is helpful to the speaker because:
- A. It helps the speaker watch for audience reaction ____
- B. It helps the speaker watch for signs of misunderstanding ____
- C. It enables the speaker to pick out signs of doubt ____
- D. All of the above ____

4. An effective speaker would:
- A. Look lively and sincere ____
- B. Keep his face as blank as possible ____
- C. Look overly composed; ____
- D. Look disinterested about the subject ____

5. Body language can indicate:
- A. Emphasis ____
- B. Firmness of purpose ____
- C. Indifference ____
- D. All of the above ____

6. These items would be included in a group of visual aids:
- A. Phonograph records and record player ____
- B. Charts, graphs, and maps ____
- C. Tape decks and cassettes ____
- D. All of the above ____

7. It is preferable for a speaker to use:
- A. Many abstract and general words ____
- B. Precise words ____
- C. Fancy words ____
- D. Round-about expressions ____

8. As a speaker, you should:

A. Use your own language _____
B. Pattern your language after someone else _____
C. Imitate highly educated people _____
D. Use the occasion to try out big words you are learning _____

9. Accomplished speakers:

A. Deliver their speeches as fast as they can to economize time _____
B. Deliver their speeches at a very slow rate _____
C. Give very solemn speeches at a rapid rate _____
D. Vary the rate within the speech to achieve variety _____

10. An effective speaker would:

A. Speak rapidly without leaving any break between sentences _____
B. Fill up the spaces by saying "ah" _____
C. Pause occasionally _____
D. Use "you know" to fill in _____

11. A good technique in human relations is to:

A. Tell others they are wrong about everything _____
B. Point out the other person's faults _____
C. Admit your own mistakes _____
D. Attack others personally _____

12. The most sought after people are those who:

A. Tell others all about themselves _____
B. Are good listeners _____
C. Smile only when necessary _____
D. Let others know how they feel about every subject _____

13. For a person who has recently been hired, it is preferable to:

A. Be quick to show what others are doing wrong _____
B. Be suspicious of others until they prove themselves _____
C. Try to convince others to think as you do on every subject _____
D. None of the above _____

14. A good technique in human relations is to:

A. Ask the opinions of others _____
B. Help other people get what they want _____
C. Present your doubts in the form of a question _____
D. All of the above _____

Answer Key

1. A	4. A	7. B	10. C	13. D
2. C	5. D	8. A	11. C	14. D
3. D	6. B	9. D	12. B	

Preparing for Public Service Occupations

Evaluation Questions

2

Unit 2 Written Communications

1. **Which type of letter would be correct for a public service worker to send:**
   A. A letter containing erasures _____
   B. A letter reflecting goodwill _____
   C. A rude letter _____
   D. An impersonal letter _____

2. **Memos usually leave out:**
   A. Complimentary closings _____
   B. The name of the sender _____
   C. The name of the addressee _____
   D. The date the memo was sent _____

3. **A good business letter would not contain:**
   A. Short, simple words, sentences, and paragraphs _____
   B. Information contained in the letter being answered _____
   C. Concrete nouns and active verbs _____
   D. Orderly placed paragraphs _____

4. **In writing business letters it is important to:**
   A. Use a conversational tone _____
   B. Use a hard, cold tone _____
   C. Use abstract words _____
   D. Use a passive tone _____

5. **Messages between departments in an agency are usually sent by:**
   A. Letter _____
   B. Memo _____
   C. Telegram _____
   D. Long reports _____

6. **Repetitive work can be simplified by the use of:**
   A. Memos _____
   B. Telegrams _____
   C. Forms _____
   D. Reports _____

7. **In filling out forms and applications, it is important to be:**
   A. Legible _____
   B. Complete _____
   C. Accurate _____
   D. All of the above _____

8. Memos should be:

A. Clear _____
B. Brief _____
C. Complete _____
D. All of the above _____

9. Minutes of meetings should not include:

A. The opinions of the recorder _____
B. The approval of previous minutes _____
C. The corrections of previous minutes _____
D. The voting members present _____

10. Reports are written by public service workers to:

A. Assemble information in one place _____
B. Aid the organization in making decisions _____
C. Inform the public and other agencies _____
D. All of the above _____

11. News releases should include:

A. A lead paragraph summarizing the story _____
B. Long paragraphs about many topics _____
C. The writer's opinion _____
D. All of the above _____

12. Readers of news releases and reports are influenced by the:

A. Content of the material _____
B. Accuracy of the material _____
C. Physical appearance of the material _____
D. All of the above _____

13. The contents of a report should not include:

A. A description of the problem _____
B. The questions to be answered _____
C. Unimportant information _____
D. A summary of findings _____

14. People tend to be influenced easier if:

A. They can see something in the position that would be advantageous to them _____
C. They are almost ready to agree anyhow _____
C. The appeal to the emotions is not overly strong _____
D. All of the above _____

Answer Key

1. B	4. A	7. D	10. D	13. C
2. A	5. B	8. D	11. A	14. D
3. B	6. C	9. A	12. D	

Unit 3 Basic Report Writing

1. **Public service workers are likely to write:**
   A. Formal reports ____
   B. Informal reports ____
   C. Semi-formal reports ____
   D. All of the above ____

2. **Which statement is untrue?**
   A. A good report writer does not have to be exact about facts ____
   B. A good report writer writes objectively and accurately about his observations ____
   C. A good report writer uses visual aids where they will help put over the message ____
   D. A good report writer gathers his material in an orderly way ____

3. **Police reports are important because:**
   A. They help settle arguments ____
   B. They help refresh the officer's memory ____
   C. Financial settlements may be involved ____
   D. All of the above ____

4. **Which statement is not true?**
   A. A good paragraph contains materials arranged in random order ____
   B. The length of the paragraph is suited to its importance ____
   C. A good paragraph is mechanically correct — indented or set off ____
   D. A good paragraph should make orderly, clear passage from one paragraph to another ____

5. **A good paragraph should:**
   A. Include all minor details ____
   B. Contain a topic sentence ____
   C. Leave out the main ideas ____
   D. Leave out the important details ____

6. **Inaccurate and incomplete reports can cause:**
   A. Misunderstanding ____
   B. Anger ____
   C. Costly errors ____
   D. All of the above ____

7. **Writers do not refer to dictionaries when they need to know:**
   A. Correct spelling ____
   B. How a word should be divided ____
   C. Detailed information about a subject ____
   D. Whether a hyphen should be used ____

8. Good report writers use:

A. Slang as much as possible _____
B. Words with unpleasant meanings _____
C. Phrases that rid the writer of responsibility _____
D. None of the above _____

9. When writing a report, it is best to use:

A. Phrases that are used over and over _____
B. Short, simple sentences _____
C. As many words as possible _____
D. An inactive tone _____

10. Which statement is incorrect?

A. A number which begins a sentence is written as a figure _____
B. Numbers under ten are usually written as words _____
C. Numbers requiring the use of more than one word are usually written as figures _____
D. Numbers which contain decimal fractions are always written as figures _____

11. Contractions are seldom used in:

A. Field reports _____
B. Semi-formal reports _____
C. Formal reports _____
D. Informal reports _____

12. Titles and the names of organizations are:

A. Never capitalized _____
B. Not capitalized in informal reports _____
C. Sometimes capitalized in formal reports _____
D. Always capitalized _____

13. After introductory clauses or phrases, one should use:

A. A period _____
B. A comma _____
C. A question mark _____
D. An exclamation mark _____

14. Between long, unrelated clauses that are connected with a conjunction, one should use:

A. A period _____
B. A question mark _____
C. A semi-colon _____
D. A colon _____

Answer Key

1. D	4. A	7. C	10. A	13. B
2. A	5. B	8. D	11. C	14. C
3. D	6. D	9. B	12. D	

Preparing for Public Service Occupations

Evaluation Questions

4

Unit 4 Basic Record Keeping

1. Which one is not a basic reason for keeping records?
- A. To prove past actions ____
- B. To keep the staff working hard ____
- C. To obtain information for the present ____
- D. To help in planning for the future ____

2. Which statement is untrue?
- A. The filing system should be as simple as possible ____
- B. The filing system should be easily reached by those who use it ____
- C. Care should be taken that nothing is ever taken out of the filing system ____
- D. Care should be taken to keep the records storage area safe from fire and vandalism ____

3. If an agency has collected many papers on one topic or thing, it may use which filing system?
- A. A subject system ____
- B. A geographic system ____
- C. A numeric system ____
- D. The Dewey Decimal System ____

4. Which type of filing is the Dewey Decimal System based on?
- A. Alphabetical ____
- B. Subject ____
- C. Numeric ____
- D. All of the above ____

5. The first step in filing is to:
- A. Index the material ____
- B. Separate the materials from other office material ____
- C. Inspect them for completeness ____
- D. Determine which type of filing is best ____

6. Data processing by public service workers means:
- A. Gathering together unorganized bits of knowledge ____
- B. Classifying knowledge ____
- C. Recording knowledge in an organized manner ____
- D. All of the above ____

7. Which statement is untrue of punched tape data?
- A. It is not accurate and can not be produced quickly ____
- B. Data are recorded in the form of holes in a vertical column ____
- C. Data are recorded in vertical columns called channels ____
- D. Data are recorded continuously ____

8. Data recorded on magnetic tape are in the form of:

A. Holes punched in the middle of the tape _____
B. Holes punched on the edges of the tape _____
C. Invisible spots called bits _____
D. Holes punched in vertical columns _____

9. An edge-punched card has data punched:

A. Along one or both edges and/or across the ends _____
B. On tape _____
C. In the middle of the card _____
D. All of the above _____

10. Magnetic tape processing differs from card processing in that:

A. It is faster _____
B. The data can be erased _____
C. The tape can be reused _____
D. All of the above _____

11. Filing space can be saved by:

A. Putting the data on punched cards _____
B. Microfilming the records _____
C. Recording the data on magnetic tape _____
D. Putting the data on punched tape _____

12. Which statement is not true about computers?

A. A computer is much faster than punched card and punched tape processing _____
B. A computer can put data into storage and can get it when instructed to do so _____
C. A computer knows when wrong information is fed into it _____
D. A computer can do many operations without human beings and at high speed _____

13. Which statement is untrue of punched card data?

A. Each hole has a meaning, and groups of holes represent words _____
B. The data have to be copied over and over again by human beings _____
C. The results of processing can come out in printed material _____
D. The machine can read the holes in the cards and can follow directions _____

14. If you are looking for a misfiled record it would be wise to:

A. Look through the folder thoroughly _____
B. Check the "out" folders or substitution cards to see who had it last _____
C. Look in the "To Be Filed" or "Being Microfilmed" trays _____
D. All of the above _____

Answer Key

1. B	4. D	7. A	10. D	13. B
2. C	5. B	8. C	11. B	14. D
3. A	6. D	9. A	12. C	

Unit 5 Good Grooming

Public service managers realize that their workers will be dealing with the public. As workers are considered a part of the agency that hired them, their appearance reflects upon the agency that they represent.

Two top level jobs at the front desk are open. As public service manager, you must select two workers for these jobs.

All of the following people have the necessary skills and qualifications to advance, and all of them have expressed a desire to be promoted.

Which two workers would you select?

Mary misses many working days. She is a picky eater. She dates often and usually does not get to bed before 1:00 a.m. Mary's hair is dull and her skin is oily. Although Mary is well dressed, her posture is poor. Did you select Mary? Yes —— No ——	
	John does not care to spend money on clothes because he believes in saving his money. He often wears clothes that are slightly soiled. His teeth are dirty and at times his breath has an unpleasant odor. John feels that these things are unimportant and that he should not change his appearance to please others. Did you select John? Yes —— No ——
Susan is a shy girl who feels she is poor at most things. Susan is very thin. Her choice of clothing is not flattering to her. Although she has good features, she feels she is unattractive. Did you select Susan? Yes —— No ——	

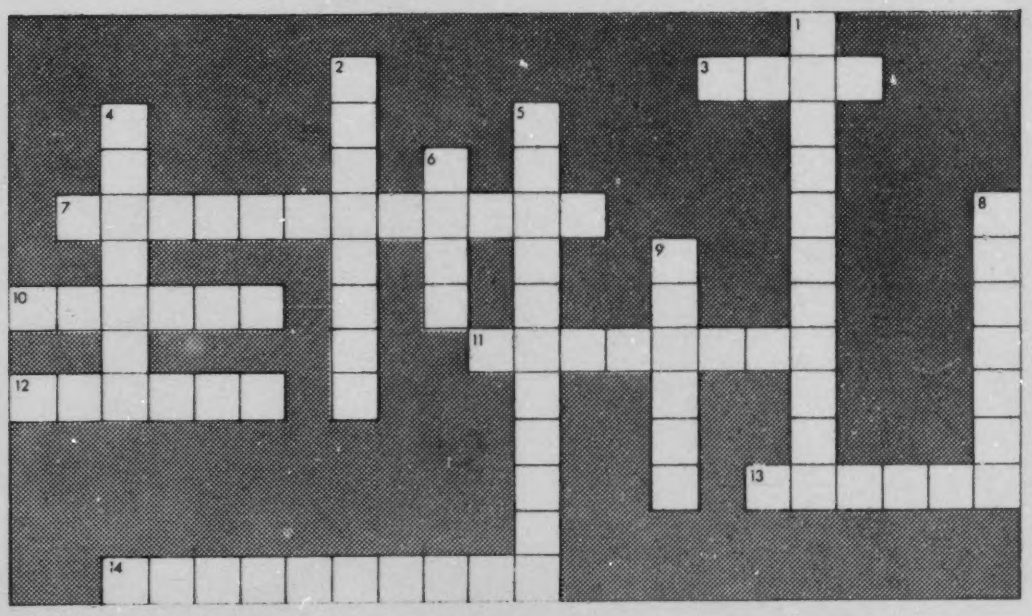
	Jack belongs to a motorcycle club. His nails are dirty and he does not shave often. His shoulder-length hair is dirty and unkempt. As he does not believe in bathing, he has a strong body odor. Jack wears tight black pants, a black leather jacket, and high heeled boots to work. Jack believes he should be free to dress as he wishes. Did you select Jack? Yes —— No ——
Sam has many outside interests. He enjoys active sports and keeps his body in good shape. He believes in eating the right foods and getting the proper amounts of rest and exercise. Sam has excellent posture. Did you select Sam? Yes —— No ——	
	Sally is a single girl who is very concerned about her looks. Sally goes on dates after work so she wears plunging necklines, short tight dresses, and heavy jewelry. She has a very fancy hair style. Did you select Sally? Yes —— No ——

Answer Key

Answers will vary on this test. The instructor may wish to have a discussion after the test, with students justifying their selections. Students may be evaluated on the soundness of their judgement.

Unit 6 Relationships with Other People

Fill in the crossword puzzle below.



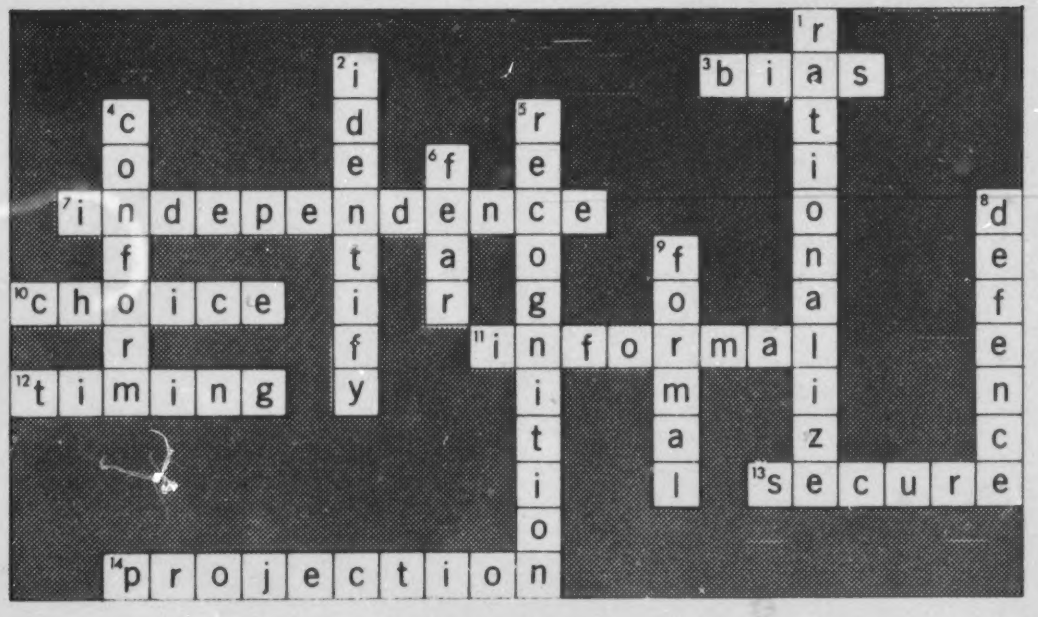
ACROSS:

3. A strong prejudice or_____can block good relationships.
7. Being able to do what one wants to do satisfies the need for _____ .
10. One's_____of words should be correct for the occasion.
11. Friends usually have an_____relationship.
12. In talking over problems with others, is important.
13. Everyone needs to feel_____.
14. _____ is assigning one's traits to others.

DOWN:

1. We_____when we try to make our actions seem logical.
2. When we assume someone's qualities as our own, we_____with that person.
4. Individuals_____when they do what is socially proper.
5. When we attract favorable attention, we gain _____ .
6. Some people have a strong_____of failure.
8. _____mechanics help to protect a person from anxiety.
9. A public service worker usually has a_____relationship with the public.

Answer Key


1 r
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4 c
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7 i n d e p e n d e n c e
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14 p r o j e c t i o n

Unit 7 Interviewing Skills

1. The purpose of an interview could be:
- A. To obtain information _____
- B. To give information _____
- C. To evaluate a person's background _____
- D. All of the above _____

2. The first job of the interview is to:
- A. Get to the subject quickly _____
- B. Put the applicant at ease _____
- C. Tell the applicant about the boss _____
- D. Tell the applicant about the job that is open _____

3. A skillful interview will:
- A. Watch the applicant's body language _____
- B. Listen to the applicant _____
- C. Ask questions to get information _____
- D. All of the above _____

4. Questions that are very specific and can be answered "yes" or "no" are called:
- A. Directive _____
- B. Non-directive _____
- C. Indirective _____
- D. None of the above _____

5. If the applicant cannot be hired, the interview should:
- A. Avoid telling the applicant _____
- B. Tell the applicant as bluntly as possible _____
- C. Tell the applicant tactfully _____
- D. Give the applicant another chance _____

6. Taking notes during an interview can:
- A. Help the interviewer remember the main points _____
- B. Be distracting to the interviewee _____
- C. Make the interviewee reluctant to talk _____
- D. All of the above _____

7. An interviewer with personal likes and dislikes should:
- A. Try to control them in order to be flexible _____
- B. Try to find people with the same likes and dislikes _____
- C. Try to get rid of all personal likes and dislikes _____
- D. None of the above _____

8. The telephone is an effective way of finding out information because

A. Doubts can be picked up from a person's voice
B. The person called can talk freely
C. It doesn't take much time
D. All of the above

9. Interviewers should:

A. Reach conclusions about the applicant as soon as possible
B. Keep applicants on the track by asking directive questions
C. Let applicants talk on any subject that is comfortable to them
D. Help the applicant with words when the applicant is unable to think

10. Shy applicants may talk more if the interviewer:

A. Looks bored
B. Asks open-ended questions
C. Asks directive questions
D. Does most of the talking

11. Interviewers should:

A. Talk down to the applicant
B. Make sure they dominate the interview
C. Listen as well as talk
D. Guide the applicant's words

12. After interviews, interviewers should ask themselves:

A. What was learned about the applicant
B. What was not learned
C. What problems came up and if they were solved
D. All of the above

13. Which one is not a reason for asking for personal refererces:

A. To find out information about the applicant's family
B. To find out what people who know the applicant think of the applicant's work
C. To find out if the information on the application is true
D. To get more information

14. Letters of reference may be:

A. Incomplete
B. Vague
C. Dishonest
D. All of the above

15. Information told in confidence should:

A. Not be kept from all office personnel
B. Not be told to anyone
C. Be told to those who need-to-know
D. None of the above

Answer Key

1. D	4. A	7. A	10. B	13. A
2. B	5. C	8. D	11. C	14. D
3. D	6. D	9. B	12. D	15. C

Preparing for Public Service Occupations

Evaluation Questions

8

Unit 8 Applying for Public–Service Jobs

1. **People are chosen under the civil service system on the basis of:**
   A. Interest ____
   B. Ability ____
   C. Personal friendship ____
   D. All of the above ____
2. **A good way to find out one's ability is to take:**
   A. An occupational preference test ____
   B. An interest inventory ____
   C. An aptitude test ____
   D. None of the above ____
3. **The best procedure to get a job would be to:**
   A. Find out what positions are open, find out more about the positions, then find out your abilities and interests ____
   B. Apply for a lot of jobs, find out what positions are open, find out about the positions, discover your interests and abilities ____
   C. Discover your interests and abilities; select your occupational group, then find out about possible positions ____
   D. Select your occupational group; apply for many jobs, find out what positions are open ____
4. **After selecting an occupational group, one should:**
   A. Select a specialty ____
   B. Find out about job vacancies ____
   C. Get more information about the position ____
   D. All of the above ____
5. **Persons having high school training may apply for:**
   A. Entry level positions such as clerical aide ____
   B. Manager positions ____
   C. Professional occupations ____
   D. None of the above ____
6. **Information about job opportunities can be found at:**
   A. The Federal Job Information Centers ____
   B. City Personnel Offices ____
   C. The Post Offices ____
   D. All of the above ____
7. **These persons are not eligible for civil service jobs:**
   A. People between the ages of 18-65 years of age ____
   B. People who are not citizens of the United States and do not wish to become citizens ____
   C. Handicapped people who can perform work efficiently without being a hazard ____
   D. People who are physically able to perform the work required ____

8. Which statement is untrue?

A. It is not necessary to put information on applications that can be found on other applications on file _____

B. Work history should include the name and address of each employer and the reason for leaving each job _____

C. Work history should include a brief description of the work performed on each job _____

D. Applicants should list courses taken, dates they were completed, and diplomas earned _____

9. Persons who are eligible for most civil service jobs are:

A. People over 65 years of age _____

B. Eighteen-year-old high school graduates _____

C. Sixteen-year-olds who have dropped out of high school one month ago _____

D. All of the above _____

10. In preparing for examinations, applicants should:

A. Study for the examination _____

B. Locate the place of the examination _____

C. Leave unnecessary things at home _____

D. All of the above _____

11. On civil service examinations, applicants should not:

A. Listen carefully to the instructions _____

B. Leave questions unanswered _____

C. Follow directions _____

D. Ask the administrator anything _____

12. Which statement about oral interviews is untrue?

A. Panel members rate applicants on their behavior and grooming _____

B. Panel members ask questions about the applicant's work experience and background _____

C. It is not necessary to pass the oral interview if the other parts of the examination have been passed _____

D. Applicants should think through how they will present their qualifications so their presentations will be good _____

13. Which statement about eligible people for civil service jobs is untrue?

A. Papers are graded with the person's name on the paper, then matched to a number _____

B. The eligible list is made up of people who have passed the written and/or the oral exam _____

C. Papers are graded with a person's number on the paper, then matched to the person's name _____

D. The names are placed in order by the grades received and a list is made in that order _____

Answer Key

1. B	4. D	7. B	10. D	13. A
2. C	5. A	8. A	11. B	
3. C	6. D	9. B	12. C	

Unit 9 Techniques of Decision Making

Read the problem carefully, and answer each of the following questions.

You are a library assistant. Mrs. Smith, the librarian, has two high school aides, Susan and Mary. Mrs. Smith has told you that she may fire Susan if her attitude does not improve. She complained about Susan's laziness and stated that Susan's work was never finished. Mrs. Smith asked you to talk to Susan about improving her attitude. When you tried to talk to Susan about this, she got upset and went home.

After observing the aides' workload for a few days, you notice that Susan has much more work than Mary.

1. What is the problem? _____

2. Name one solution. _____

3. What are the consequences of this solution? _____

4. List another solution. _____

5. What are the consequences of this solution? _____

6. Which do you think is the best solution? _____

Read the problem carefully, and answer each of the following questions.

You are in charge of the recreation program at the community center. Your job is to keep activities running smoothly. On the daily schedule, one-half hour has been set aside for basketball. While you have stepped out for a moment, ten of the Green Hornets and ten of the Purple Dragons arrived to play basketball. As each group has two teams set up, neither group would give in. Unfortunately, a fight began. The fight ended just as you returned. Each group plans to play tomorrow. You must make a decision.

1. What is the problem? _____

2. Name one solution. _____

3. What are the consequences of this solution? _____

4. List another solution. _____

5. What are the consequences of this solution? _____

6. Which do you think is the best solution? _____

Answer Key

Answers will vary on this test. The instructor may wish to have a discussion after the test, with students justifying their selections. Students may be evaluated on the soundness of their judgement.

Project Staff

Patrick J. Weagraff, Ed. D. ..... Director
James J. Lynn, M.S. ..... Curriculum Specialist
Harold M. Blue ..... Editor
Jean Smith ..... Reproduction Typist
Miriam Dong ..... Reproduction Typist
Lillian Deger ..... Typist
Mary Sullivan ..... Typist

GPO 693-477/273

ACCESSION NUMBER: VT102224

PUBLICATION DATE: JUN75

TITLE: PREPARING FOR PUBLIC SERVICE OCCUPATIONS. EDUCATIONAL SERVICES. CURRICULUM GUIDE.

DESCRIPTOR: *PUBLIC SERVICE OCCUPATIONS; *CAREER EDUCATION; *CURRICULUM GUIDES; ENTRY WORKERS; GRADE 11; GRADE 12; ADULT EDUCATION

IDENTIFIER: CAREER PREPARATION

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 182P.; RELATED DOCUMENTS VT 102 220 THROUGH VT 102 226 IN THIS ISSUE.

ABSTRACT: THIS CURRICULUM GUIDE IS ONE OF A SERIES DEVELOPED AS PART OF THE PUBLIC SERVICE OCCUPATIONS CURRICULUM PROJECT TO ASSIST IN THE IMPLEMENTATION OF CAREER EDUCATION PROGRAMS CONCERNED WITH PUBLIC SERVICE OCCUPATIONS. THIS GUIDE CONSISTS OF SEVEN UNITS AND CONTAINS THE BASIC INSTRUCTIONAL MATERIAL RECOMMENDED FOR THE AREA OF EDUCATIONAL SERVICES PREPARATION. IT OFFERS SUGGESTIONS FOR COURSE CONTENT, TEACHING MATERIALS, AND INSTRUCTIONAL OBJECTIVES, AS WELL AS TEACHER AND STUDENT ACTIVITIES HELPFUL IN PREPARING INDIVIDUALS FOR EDUCATIONAL SERVICES ENTRY-LEVEL POSITIONS IN PUBLIC SERVICE OCCUPATIONS. THE SUBJECT MATTER IS ORIENTED TOWARD TEACHERS WITH MINIMAL TRAINING AND/OR EXPERIENCE IN PUBLIC SERVICE EDUCATIONAL PREPARATION. UNIT HEADINGS INCLUDE HUMAN GROWTH AND DEVELOPMENT, HOW PEOPLE LEARN, THE DISADVANTAGED STUDENT, INSTRUCTIONAL METHODS, BASIC SKILLS IN THE LANGUAGE ARTS, EDUCATIONAL TECHNIQUES AND MATERIALS, AND TESTING AND EVALUATION. A LIST OF RESOURCE SUPPLIERS AND SUGGESTED EVALUATION QUESTIONS FOR PRETESTS AND POSTTESTS ARE APPENDED. (AUTHOR/LJ)

CONTRACT NUMBER: OEG-0-71-4780(357)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402. (STOCK NUMBER 017-080-01435-1)

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. VOCATIONAL EDUCATION SECTION.

SPONSORING AGENCY NAME: BUREAU OF OCCUPATIONAL AND ADULT EDUCATION (DHEW/OE), WASHINGTON, D.C. DIV. OF RESEARCH AND DEMONSTRATION.

VT 102 224

Preparing for Public Service Occupations

VT 102 224

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C., 20402

Stock No. 017-080-01435-1

Preparing for Public Service Occupations

Educational Services

by:

California State Department
of Education
Vocational Education Section
Program Planning Unit
Sacramento, California 95814

in accordance with:

U.S. Office of Education
Bureau of Occupational and
Adult Education
Division of Research and
Demonstration
Curriculum Development Branch
Grant No. OEG-0-71-4780 (357)

June, 1975

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

U.S.A.

This document is one of a series of curriculum guides dealing with the Public Service Occupations career cluster. The titles of all individually available documents in this series appear below:

- Exploration of Public Service Occupations
- Orientation to Public Service Occupations
- Preparing for Public Service Occupations—Common Core
- Preparing for Public Service Occupations—Educational Services
- Preparing for Public Service Occupations—Law Enforcement Services
- Preparing for Public Service Occupations—Social Services
- Administering Public Service Occupations—An Implementation Guide

The project presented or reported herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

Developed pursuant to grant No. OEG-0-71-4780
by the California State Department of Education
Vocational-Technical Education Curriculum Laboratory
Sacramento, California
Funded by the U.S. Office of Education under
Part I - Curriculum Development in Vocational and Technical Education
Vocational Education Amendments of 1968,
Public Law 90-576
1975

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FOREWORD

This *Educational Services Career Education Curriculum Guide* is one of a series developed to assist those involved in implementing career education programs concerned with public service occupations. This Guide consists of seven units, and contains the basic instructional material recommended for the area of Educational Services preparation. It offers suggestions for course content, teaching materials, and instructional objectives, as well as teacher and student activities helpful in preparing individuals for Educational Services entry level positions in public service occupations.

The subject matter is oriented toward teachers with minimal training and/or experience in public service educational preparation. Units are presented in a sequential order; however, each is designed to stand alone as a separate body of knowledge.

Primary emphasis is on public service occupations preparation in the area of Educational Services; however, other individuals may also want to utilize the information contained in this Guide.

All of the information is "suggested," and should be adapted to meet local conditions and needs.

A wide range of suggestions and approaches to the subject were received and, wherever possible, incorporated into the final document. Since the resulting materials represent many opinions, no approval or endorsement of any institution, organization, agency, or person should be inferred.

This Guide was prepared by the California State Department of Education, Vocational Education Section, Program Planning Unit, which is under the direction of E. David Graf. The major responsibility for the coordination of this guide belongs to James J. Lynn, Curriculum Specialist, Public Service Occupations Curriculum Project.

Patrick J. Weagraff, Ed.D.
Project Director

ACKNOWLEDGEMENTS

The completion of this career education guide depended upon the assistance, advice, and cooperation of many individuals. The California State Department of Education, Vocational Education Section, Program Planning Unit, wishes to acknowledge in particular the contribution of the following individuals:

Mary Auvil
Special Consultant
Santa Cruz, California

Victor A. Backstrom
Public Service Occupations Teacher
Long Beach, California

John Bunten, Senior Program Officer
Bureau of Adult and Vocational-Technical Education
San Francisco, California

Dr. William E. Burns
Professor of Education
State University College at Buffalo
Buffalo, New York

Dr. Clark Dobson, Associate Secretary
Association for Supervision and Curriculum Development/NEA
Washington, D.C.

Dr. Ronald Detrick
Director of Career Education
San Diego Unified School District
San Diego, California

Dr. Nevin Frantz
Assistant Professor of Education
University of Georgia
Athens, Georgia

Alfred W. Koch
Curriculum Coordinator
Rawlins Public Schools
Rawlins, Wyoming

Andrew S. Korim
Public Service Specialist
American Association of Junior Colleges
Washington, D.C.

Fred Martinez, Consultant
Education for the Disadvantaged
California State Department of Education
Sacramento, California

James B. Mayo, Coordinator
Fremont-Newark Regional Occupational Program
Fremont, California

James J. McIlwrath, Consultant
Office of Program Evaluation
State Department of Education
Sacramento, California

Fred Miller, Chief
Public Service Institute
Department of Education
Harrisburg, Pennsylvania

Paul N. Peters, Manager
Career Education Task Force
State Department of Education
Sacramento, California

Mrs. Melba Williams
Georgia Municipal Association
Atlanta, Georgia

Dr. James Wykle
Education Program Specialist
U.S. Office of Education
Washington, D.C.

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Unit 1

HUMAN GROWTH AND DEVELOPMENT

Here are the contents of the introductory unit to the Education group. We suggest a careful reading of it before you read the text.

INSTRUCTIONAL OBJECTIVES 3

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Unit 1

HUMAN GROWTH AND DEVELOPMENT

INSTRUCTIONAL OBJECTIVES

1. Ability to develop an understanding of the process of human growth, and to relate it with the process of human development.

2. Ability to distinguish between the stages and areas of human development.

3. Ability to recognize that behavior is related to stages of development.

4. Ability to interpret coping behavior.

5. Ability to use an understanding of human growth and development to effectively work with people.

CONTENT

INTRODUCTION

This section has to do with understanding the process of human growth and development. Public-service employees need to know about human behavior as related to growth and development in order to work effectively with their co-workers and the people with whom they come into contact on their jobs. For example, a preschool teacher's aide should be aware of the special needs of young children, and a community program aide may need to be more aware of the special problems of senior citizens. In fact, everyone working in public service should be sensitive to the fact that the reasons for the behavior of people are closely related to their developmental stages.

If the curriculum provides insight into human development, the students are then more likely to develop this insight themselves. They should, for example, appreciate the fact that their developmental level is determined by the action of both

heredity and environment. For this reason, this unit will demonstrate that man is largely a product of his nature and training.

A teacher has an opportunity to provide students with a positive model to emulate, since students often identify immediately with the people with whom they are working. Through this identification, they can bring out, talk about, and understand some of their own past behavior, and find new ways of interacting with their fellows.

In addition, learning about human growth and development provides an opportunity for a definition of the ultimate goals of education. Setting goals at *attitudinal* levels, and understanding what this means, is important.

GROWTH AND BEHAVIOR

One method of looking at this part of life is to think of growth as gradually attaining maturity and learning.

The baby is literally a part of its mother before birth. Life is cozy at this stage, and it has no need to make demands. Human beings sometimes feel a need, at times of stress, to revert to this comfortable condition. After birth, a baby begins to learn through coping behavior; he discovers that crying elicits a response from mother. Next, he begins to learn to get around by himself, walking and exploring his environment. In time his environment expands to include his neighborhood and he makes playmates.

He goes to school - his first experience completely on his own. Peer group relations begin in elementary school and relations are formed with teachers.

Puberty begins with the adolescent stresses of approaching manhood or womanhood. Maturity and adulthood complete the pattern of growth and maturation. Responsibilities are assumed and career decisions are made.

Growth and behavior can be viewed as a continuing lifelong process: *Growth and development is a series of tasks to be accomplished and needs to be met.* If needs are not met, the individual may be unable to perform the tasks demanded at the stage of growth he is in.

Stages and Areas of Development. Human development can be classified into two distinct categories. A *stage of development* refers to a period of time, and has to do with an individual's chronological age. On the other hand, an *area of development* refers to the different aspects of individual

growth and maturing. Usually, the stages and areas of human development are classified as:

- *Stages of development:*

  Infancy to six years
  Six to twelve years
  Twelve to nineteen or twenty years
  Adulthood

- *Areas of development:*

  Physical
  Intellectural
  Social
  Emotional

Relationships of Stages. Each stage of development affects and acts on the other stages; likewise, the areas of development are also influenced by the age of the individual. Much overlap can and does occur. Developmental stages can be looked at to see if a person is accomplishing the tasks appropriate to his age. If not, why not?

If a person is unable to accomplish the tasks required by his stage of development, he may become frustrated and angry and as a result, abnormal behavior may develop. This type of behavior shows itself in all areas of development - physical, intellectual, social, and emotional. When this happens, teachers, parents, aides, social workers, and psychologists must take action to give assistance.

Growth and Development and Learning to Cope with Life. Behavior can be viewed as a *coping* activity; man survives by coping with his environment.

All human beings have to cope with living from earliest infancy. If an infant's cry gets a response, then he has coped by learning to evoke responses from his environment. He learns that making an effort brings satisfaction. When this does not happen, the baby learns early to give up and begins to feel that coping does not bring the rewards he wants. The effects of living in restricted environments where satisfaction is not attained have been noted in studies on children raised in inpersonal institutions, such as in orphanages or children's homes.

Critical phases of development (times of stress and challenge) include birth, learning to walk, or going to school for the first time. These require greater coping strengths than the intermediate periods.

The individual uses many methods of coping. The infant cries; then, as he grows, he tries talking and asking questions; as he gets older, he looks for ways of *getting around* situations. The style of coping that an individual develops grows out of his first relationships - what he has found works with his

mother and with other family members. As he gets older and goes to school and meets teachers, he will test his previously learned behavior to see what works with them. One important thing the young child soon learns is that the teacher can't be influenced or controlled by the same kind of behavior that worked with mother. The child may adjust by using *defense mechanisms* - ways of avoiding anxiety or preventing loss of self-esteem.

A person who finds he can't cope may develop these defenses:

- Withdrawal
- Projection
- Repression
- Fixation
- Identification
- Displacement

THE CHILD FROM INFANCY TO SIX YEARS

In these years, the child learns as much as he will learn during the rest of his life - not academic knowledge, but knowledge in all areas of living. Great challenges and rewards await those who work with young children in an effort to provide them with rich and varied backgrounds for future growth.

Physical Development. Hereditary factors play a large role in the child's early development. Physical growth is fastest at this stage, and the child begins to accomplish tasks which are the basis of the balance of his living:

- Breathing
- Eating
- Sucking
- Rolling over
- Sitting
- Standing
- Walking
- Using muscles
- Developing muscles
- Growth of bones and body

Large muscles develop first - we give young children large crayons rather than pencils, since it takes small muscles to hold a pencil right. Muscles have to develop in such a way that they work together, or in *coordination:* this is why a child has to learn to walk before he can skip, run, climb, etc.

Intellectual Development. The young child begins to use his five senses to explore the environment, dealing with reactions from those with whom he comes in contact. For example, the infant senses tension in the person who is feeding him, and responds to this long before he understands what tension is.

There is a distinct relationship between sensory and intellectual development. For example, the use of eyes, ears, taste,

smell, and touch to find out what the environment is like. Sensory defects or handicaps can interfere with learning, as well as social or emotional development.

The young child must accomplish certain intellectual tasks:

- He must become aware of his immediate environment; for example, he needs to know about the house in which he lives and what the people in it are like;
- He learns how to talk; learning to communicate with others is a significant event in the child's life;
- Feelings are developed in the child; he experiences trust, individuality, and love;
- He begins to think on a concrete level; his thinking is not logical or abstract yet.

As a public-service worker, one should be supportive of the child at this stage, accepting the child's mistakes and allowing him to learn from them. The child should not be made to feel ashamed of his efforts. Negative feelings should be avoided - whenever possible, stress positive feelings and attitudes. The child's self-image must be allowed to develop in a positive, healthy environment. The way the child feels about himself will be reflected in practically everything he does.

Social Development. The infant first develops a social sense through relationships with mother, then father, relatives, brothers, sisters, and playmates. As the child grows and is able to get around and talk, he competes with brothers and sisters for attention and affection from parents and others. This is the individual's first experience with a group. He will tend to behave in other groups, such as school, the way he has learned to behave at home.

The growing child begins to socialize with people outside his family. First, he plays with friends or playmates at home, then in the neighborhood, then in preschool. At preschool he must find a place for himself in the group, or he may begin to think of himself as unworthy of others' friendship. If this happens, he may withdraw and not try any more, or he may try to make a place for himself by becoming the class clown. His teacher's attitude toward him is important in helping him to deal with this problem.

Relationship to society should begin sometime during elementary school. The child should begin to think of himself as part of the larger society, and begin to have feelings of identity because he *belongs* to the group. Ability to give up some of one's wants and desires for the good of the group cannot be developed unless the individual feels that he belongs some-

where. Absence of a sense of belonging is considered by some scientists to be the origin of antisocial behavior.

Social tasks to be accomplished include:

- Learning to get along,
- Learning to give and take,
- Learning to assert himself.

Once again, the concept of self-image comes up. It is necessary that those who work with children help the child to acquire a feeling of self-worth. The self-image that a child develops in this stage must be a positive, healthy one - it is extremely important that the young child feels good about himself.

Emotional Development. This area is closely related to social development and to the establishment of self-worth. These two areas are also closely related to the physical and intellectual growth that enable the person to take his place in a group, to compete physically and intellectually, to win and to lose.

Emotions such as fear, anger, love, and self-image begin to have increasingly important meaning. Likewise, the infant begins to have definite reactions to such fears as loud noise, loss of support, and loneliness. As the child grows older, fear of new things, such as the unknown and the dark, influence his imagination to the extent that the child often is not able to really distinguish between fantasy and reality.

The infant becomes angry when his needs are not met. When he feels rejected, unfairly treated, or misunderstood, he may cry or feel frustrated. Anger will be repressed if the child finds that the punishment for expressing it is too great. He will feel a need to have angry feelings even though he is not allowed to act them out. Thus, the child should be encouraged to express his feelings.

The ability to love and to trust develops when a child feels loved and trusted, and when the parents have proved trustworthy in meeting his needs as he grows. A child can take a lot of deprivation in material things such as toys and clothes if he feels that he is valued and loved by his parents. If he has not been able to trust an adult, or to feel loved by one, he will have a hard time trusting and loving as he grows older.

Sexual curiosity begins; bodily exploration is natural for children between four to six years.

The task of the individual as he grows older is to develop emotional maturity. That is, he must gain the ability to accept responsibility for what he does, to compete and win or lose, to give and take love, to express or overcome his anger. In short, he must prepare himself to reach adulthood as a mentally healthy person.

THE CHILD FROM SIX TO TWELVE

Not only are the physical, intellectual, social, and emotional areas of development closely related, but each stage of development depends on, and will be influenced by, what went on in the stage before it. For instance, a preschooler who felt unwanted at home and who found no place for himself in his preschool group will come into elementary school expecting not to be liked. If his new teacher cannot help him overcome this feeling, his expectations might lead him to behave in a way that will make his classmates reject him.

Physical Development. By the age of six the child has learned to coordinate and use his muscles to run, skip, climb, throw a ball, and play games of physical skill. At six, physical growth slows up, though the muscles continue to increase in strength.

Sometimes before age twelve there will be a spurt in development of sexual characteristics and their outward appearance on the body.

Physical health will influence both behavior and learning. For example, eye problems and defective hearing often show up now. Early detection of problems of this nature is important for truly effective learning.

Athletic skills affect emotional and social adjustment because of acceptance or rejection by the child's peers.

Children at this age may also be cruel to anyone who is different, teasing others about physical handicaps.

Intellectual Development. The child of six is supposed to come to school with elementary concepts about the world around him. He should be able to sort things into categories, hear differences in sounds, and have a fairly well developed vocabulary and speech. Children lacking these skills often find themselves unacceptable to their teacher and are labeled as slow to learn. They sometimes begin to think of themselves as stupid, particularly if this is the way their teacher sees them.

Conformity and the need to be accepted by classmates are important now. Learning difficulties can be caused by many things:

- low intelligence,
- fear of competition,
- fear of new situations (school),
- fear of failure,
- lack of motivation to learn since the family does not value learning.

Opposing feelings may crop up; for example, wanting to grow up and wanting to remain a baby at the same time. Such experiences are called *ambivalent feelings*.

Social and Emotional Development. These two areas are put together because they are so closely intertwined at this age. Social acceptance by one's peers becomes more important at the age of six than almost anything else. Attitudes of his peers greatly influence emotional development and self-concept. From four to six it is important to be accepted by both sexes. From six to ten children tend to ignore the opposite sex.

Acceptance by peers now requires skills and the ability to use them in physical, social, or intellectual competition. The ability to lead and to follow develops now. Acceptance of group values is the rule, rather than those of teacher or family. The latter sometimes leads to great conflict in the child, particularly when the teacher encourages or demands tattling.

Sex-role identification occurs. This becomes increasingly important as children begin to play more and more with their own sex group. Cultural stereotypes are developed. For example, males are supposed to be aggressive, strong, restless, and daring; females are supposed to be docile, timid, and amiable. The parents are often the role models in this process.

The child about nine begins to more and more reflect his sex role. Girls usually like quiet games and domestic play; boys like rough play, mechanical things, and books and stories about daring heroes or athletes. A natural *gang* stage appears at this time as boys associate primarily with boys and girls associate with other girls. Acceptance by peers is strongly influenced by adoption of the right sex role.

Conscience in middle childhood is developed in terms of doing things that will make them accepted by other children. Social acceptance becomes the rule. The young child wants to be independent, and efforts to break away from family control are strong. Between nine and twelve, children are often angry, restless, moody, and rebellious.

Their need for social acceptance very often leads to their joining peer groups: *cliques or gangs*. In elementary school, gangs are formed and it is terribly important to belong. The gang can be very cruel to the outsider. Peer-group attitudes can drastically influence an individual's values and attitudes toward learning, self-image, functioning in a group, etc. When gang values are not the same as those of the teacher and the school, the member of the gang is in continuous conflict, both within himself, and with others.

ADOLESCENCE

Adolescence is a difficult time; a time of many changes; a time when young people try to find out just who they are, what they care about, and what they want to do in this world. They search for their identity and try to find where they belong in society. Consequently, adolescence is a time of great tension and uncertainty, which is reflected in all areas of development. The areas of physical, intellectual, social, and emotional development will all be influenced, and will influence each other as the individual tries to find himself.

Physical Development. Rapid growth in stature occurs, not unlike the first years of growth. Characteristic developments in this area include body changes accompanying glandular development and sexual characteristics, manifested by such things as voice changes, and awkwardness with the opposite sex.

There are individual differences in the rate at which these changes occur. Physical growth progresses at different rates for various parts of the body. Some individuals lag way behind and begin to think of themselves as unattractive to the opposite sex.

Hence, there is a great interrelation between physical growth and self-concept at this age. At the same time, the adolescent fears his own sexuality, and may be embarrassed by it.

Intellectual Development. From the ages of thirteen to sixteen, mental ability continues to increase, and then begins to level off. The individual can now reason for himself, *he can not only think about and imagine things* that he cannot see, hear, or feel, *but he can also evaluate* the logic of his thinking and reasoning.

The adolescent develops special interests, particularly as he begins to realize that he must make definitive educational and vocational choices. He utilizes past knowledge of job requirements. He may take trips to see certain career persons at work, and do additional reading to become thoroughly

familiar with jobs and careers. This career exploration and orientation will build toward a career choice in late adolescence.

Social Development. Early adolescence is the time of the close friendship with a chum, usually with members of the same sex. The course of the friendship and the person's feelings about himself are largely influenced by his previous development. For example, his success or failure as a young child, in elementary school, and now in high school. His values and interests reflect not only his present experiences, but the past as well. His behavior is largely the product of his biological endowment (heredity), and his environmental experiences (training).

Social development also occurs with the opposite sex, but usually with less speed. In relations with the opposite sex, too, both the past and the present bear on the person's feelings about sexuality, his own personal worth, and very emphatically on how he views his own sexual attractiveness. It is very important for him to look, dress, act, and behave like his peers.

Sexual morality is important in adolescence, although sexual yearnings and needs often conflict with the patterns of behavior which are acceptable to the parents, teachers, and school. The values of the peer group as a whole are often opposite to those of adults in authority. The individual must now decide for himself whether he shall choose the values of his friends or those of the establishment - parents, teachers, ministers, law-enforcement personnel. If he chooses the latter group, he may sacrifice popularity with his peers, which is terribly important at this age. The value judgments he makes now will affect how well he handles the following:

- *Dating* - When, with whom, how often?
- *Sexual behavior* - Boys fear inability to perform; girls fear pregnancy.
- *Adolescent behavior* - In relation to society as a whole.
- *Drugs* - Use or nonuse, why, what kinds, legal/medical restraints?
- *Rebellion* - Why? To what degree?
- *Conformity* - Why? To what degree?
- *Noncommittal* - Why? To what degree?

Emotional Development. Youth at this stage often feel a conflict between the desire to mature and the desire to remain a baby, and to refuse work and responsibility. Young people

may act mature at one moment, immature at another. By fluctuating their behavior between being demanding babies and responsible adults, they reflect basic conflicts of identity. They feel conflicts about the need to make decisions, especially about education, vocation, and marriage.

The self-concept developed during the preceding years usually enables them to withstand stress and frustration and come to some decisions. Final resolution of conflict comes about by separation from parents, and the establishment of independence. A sense of responsibility develops at this stage.

THE ADULT

If development has proceeded normally, the individual is now mature and ready to take his place as a functioning member of society. Though his physical growth has been completed, intellectual, social, and emotional growth and learning can continue for the rest of his life. He can go on learning to know and value himself.

He should be able to realistically appraise his strengths and weaknesses. The adult develops ways of capitalizing on strengths, and learns how to cope with weaknesses. That is, he can become more and more mentally healthy, with an increasing ability to form good relationships with his fellow human beings. In short, he learns to accept himself as he really is.

The mature adult is able to recognize that he has both strengths and weaknesses, capacities for good and evil, and the ability to continue to learn and change, no matter what his age may be.

STUDENT LEARNING ACTIVITIES

- View, and be prepared to discuss, such films on growth and development as: *Meaning of Adolescence; Who is Sylvia;* and *Human Growth and Development: Facts and Feelings.*
- Observe, and discuss in small groups, presentations on growth and development, such as: *The Individual: A Product of Heredity and Environment; Major Growth Periods;* and *Interrelated Dimensions of Growth and Development, Level 4.*
- View filmstrip presentations on human development, *Developing Your Personality*; or *The Story of Human Life, No. 2.*
- Listen to such experts as school counselors or psychologists discuss human growth and development.
- Discuss questions such as:

  Why do people learn how to cope?

What problems of adolescence do you think might relate to you?

How does physical growth affect behavior at different developmental stages?

- Engage in individual study whenever possible on selected topics, as:

  How much of behavior is determined by hereditary factors and how much by training (environmental) factors?

  Why do preschool teacher's aides need to understand the process of growth and development?

- Role-play various defense mechanisms. For example, dramatize some typical defenses of a person who cannot cope: withdrawal, projection, fighting, crying, etc.

- Observe such movies or slides of people at different developmental stages as: *Development of Individual Differences;* and *Health and Safety Correlated Text-Film Series: Your Body During Adolescence.* Be prepared to discuss relationship of behavior to developmental stages.

- Write a brief essay telling how understanding human growth and development will enable you to work more effectively as a public servant.

- Prepare questions on difficult points to ask selected public-service workers when they visit your class.

TEACHER MANAGEMENT ACTIVITIES

- Show and discuss with the class, films on the stages and areas of development. For example, *Meaning of Adolescence; Who is Sylvia;* and *The Story of Human Life, No. 2.*

- Present, and allow for small group discussion afterwards, basic concepts of growth and development with such transparencies, as, *The Individual: A Product of Heredity and Environment; Responsibilities of Pre-Adulthood, Level 4;* and *Major Growth Periods.*

- Use instructional aids, for example, *Birth and Human Development,* to demonstrate the process of human development.

- Arrange for visits by counselors or school psychologists to discuss human growth and development. Have the students prepare lists of questions to ask the visiting experts.

- Encourage students to discuss the questions and points presented as the problems of adolescence, or the relationships between physical growth and developmental stages.

- Provide opportunities for individual study whenever possible. For example, assign supplementary readings on the influence of heredity as compared with training. Encourage students to explore materials on growth and development at the school library or media center.

- Have students participate in role-playing situations to show various defenses used when persons cannot cope; for example, withdrawal, projection, fighting, crying, etc.

- Allow and encourage students to relate personal experiences of how growth and development has affected their behavior.

- Have the students write essays on understanding growth and development, and how this can help them work more effectively in public service.

- Bring public-service workers from the education and social service groups into class to discuss points of concern.

RESOURCES

The Story of Human Life, No. 2 (Filmstrip, purchase), Educational Activities, 1968.

Birth and Human Development (Study print, purchase), Instructional Aids, 1970.

Major Growth Periods (Transparency, purchase), Creative Visuals, 1969.

Growth: Quantitative and Qualitative (Transparency, purchase), 3M Company, 1969.

Interrelated Dimensions of Growth and Development, Level 4 (Transparency, purchase), 3M Company, 1969.

Human Growth and Development: Facts and Feelings (Sound filmstrip, purchase), Warren Schloat Productions, Inc., Pleasantville, New York, 1972.

The Individual: A Product of Heredity and Environment (Transparency, purchase), Creative Visuals, 1969.

Developing Your Personality (Filmstrip, purchase), Harcourt Brase and Jovanovich, Inc., 1969.

Health and Safety Correlated Text-Film Series: Your Body During Adolescence (Movie, 16mm reel, purchase), McGraw Hill, 1969.

Adolescent Girl in Conflict, Gisela Kanopka, Prentice-Hall, 1966.

Responsibilities of Pre-Adulthood, Level 4 (Transparency, purchase), 3M Company, 1969.

The Cool World, Warren Miller, Fawcett World Library, 1965.

"It's the Same, But It's Different," Robert Coles, *Daedalus*, Fall, 1965.

Frontiers of Psychological Research, Stanley Coopersmith, W. H. Freeman and Company, 1966.

Films Available from Head Start:

Each Child Is Different (16mm, 17 min.), McGraw-Hill, 1965.
Development of Individual Difference (15 min.)
Meaning of Adolescence (16 min.)
Who is Sylvia (30 min.)

Unit 2

HOW PEOPLE LEARN

Here are the contents of Unit 2 of the Education Group.
We suggest a careful reading of it before you read the text.

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Unit 2

HOW PEOPLE LEARN

INSTRUCTIONAL OBJECTIVES

1. Ability to form a personal definition of human learning.
2. Ability to differentiate between trial and error and other forms of human learning.
3. Ability to demonstrate a knowledge of the basic factors in effective learning.
4. Ability to recognize the importance of individual differences in learning abilities.
5. Ability to understand how the learning environment can affect the progress of human learning.
6. Ability to apply elementary concepts of human learning to work more effectively in the field of public service.

CONTENT

INTRODUCTION

It is impossible for a teacher's aide to assist in an educational program without a knowledge of how students learn and why instructors employ certain teaching methods. Some instructors may use good techniques of instruction without knowing much of the theory of learning. But both the teacher's aide and the instructor will do a better job in the long run, and in new and changing situations, if they have an understanding of the basic learning theory related to the specific techniques required for helping people to learn and grow.

This section deals with some of the facts and principles of learning and teaching on which effective instruction for educational training can be based.

People learn in many different ways: by reading, listening, watching, doing useful things, thinking, and solving problems. The success of any of these ways of learning depends on several elements, of which attention and interest are the central and overriding forces. In an educational setting, no method or approach to learning can be very successful if it fails to hold the student's interest and attention. It is relatively easy to determine when students are interested in subject matter. It is more difficult to determine when they are not. For example, students having a strong desire to learn a certain language are able to learn the required vocabulary and structure even though in the past they may have done poorly in, or avoided, such courses.

Attention will vary with the nature of the subject, the level and quantity of the instruction, and with the previous experiences of the student both in and out of school. Students with experience or knowledge of the subject matter being presented usually are more attentive to problem-solving learning activities. With less experienced or less knowledgeable students, situations involving a variety of activities are necessary.

The skilled instructor uses techniques and activities that hold the attention and interest of the greater number in his group whenever possible. They use other techniques to reach individuals in the group as the need arises. *Instructors and teacher's aides need to know how individuals learn.*

HOW DO PEOPLE LEARN?

People learn in many different ways. Among these ways are:

Learning by Trial-and-Error. When people are confronted with an uncomfortable task, they feel frustrated. This frustration stops when additional resource capabilities are put at their disposal. After a few such instances, people learn that a particular problem can be solved by seeking outside assistance. For example, a preschool teacher's aide learns that sometimes young children need assistance in getting started, and that this help reduces the child's frustration. The child can then usually continue on his own without too much additional assistance. The teacher's aide has, in this instance, learned by trial-and-error.

Usually children make many kinds of gestures and activities until assistance is received. After awhile, they learn exactly what to do to get results. Most young children learn many things by trial-and-error. But as they get older and gain experience, they don't have to make as many trials to learn what will work.

Most everyone uses trial-and-error to some extent, and this

method is the only method that can be used at times. However, contrary to popular opinion, *learning things the hard way is not always the best way.*

Learning by Observation. Much is learned by carefully watching others do something. This helps to eliminate some of the trials that would normally be made when a trial-and-error method is used.

Young children, especially, model the behavior of their parents, brothers, sisters, and preschool teachers. In fact, children are often very selective in the behavior that they model.

Studies have demonstrated that if children are able to observe people being differentially rewarded for specific behaviors, they are more likely to copy (or model) the rewarded behavior. Observing what goes on around one's surroundings is a very valuable habit. Educational programs should allow and encourage the student to learn by observation. *But more importantly, teachers should teach the student to observe with objectivity, while enhancing his learning with the necessary "doing."*

Learning by Doing. Some instructors in public schools tend to be too wordy. They confuse telling with teaching. Words are important and no instructor can do without them, but words usually convey only part of a meaning. Some form of activity or experience is necessary to help the students understand the subject. Individuals raised in cities have difficulty in forming ideas about the types of work performed on a farm unless they have had similar types of work experience. Skill acquisition requires an integration of the behaviors needed to accomplish the activity smoothly.

No amount of verbal education, TV, or movies can take the place of experience. With physical tasks, there are obvious reasons for learning by doing. Physical skills, such as climbing an aerial ladder, staking a tree, or reading a lesson to children, are examples of highly skilled behavior. They are learned by integration, and by experiencing how right the movements feel. This is the reason why an instructional demonstration should preferably be followed by the student actually doing the task.

A student may get the general idea, but can never get the *"feel"* of the skill by observation alone. When a person learns motor skills, such as using hand tools, walking, or throwing an object, a change must take place in the muscle and nervous system. This comes only through *doing*, and perhaps practicing, over a period of time whatever it is that is to be learned.

However, activities such as surveying a park, calculating tax

records, fertilizing a public garden, or even reading instructions, are usually too complicated to be learned by this method alone, and require both *observation* and *doing*.

Although it is often neglected, the principles of learning by doing hold just as well for nonphysical learning. Each principle in a lesson can be practiced by carefully prepared student assignments and problems that make use of the principle presented by the instructor. Students can summarize, review, discuss, and apply these new materials in later sessions. Training aids, including working models and achievement tests that require interpretation of facts, are effective helps to learning by doing.

Even while presenting material using lecture methods, it is possible to have mental participation by the student. The skilled instructor can apply the principle of learning by doing while talking, by challenging the trainees, and allowing time for them to:

- Answer questions silently,
- Criticize ideas,
- Disagree and try to defend their ideas,
- Apply the relationships or principles to other specific uses.

Learning by Transference. Learning one specific task or subject may help a trainee to learn other specific tasks if the two are closely related or made up of the same elements, and the student is able to recognize the relationships between these elements. Research indicates that people who have a knowledge of one language learn additional languages in shorter periods of time.

If a city park worker learns that a garden plot 3 feet by 8 feet equals 24 square feet, then by transferring this knowledge, the trainee should know without further instruction, that 8 feet multiplied by 3 feet equals 24 square feet and with a minimum of instruction, that 30 feet by 8 feet equals 240 square feet, and that 30 square feet multiplied by 80 square feet equals 2,400 square feet.

If such a transfer does not take place, in all probability the instructor has failed to illustrate the underlying principle in such a way as to enable it to come to mind in new but related situations.

When any subject matter has been taught with appropriate practice exercises and the student fails in an effort to solve a slightly different problem in which the same principles are

used, there is reason to doubt that the instructor is teaching with transfer of training in mind. In learning, practice and drill are essential, but so is an understanding of the principles involved.

Learning the "Why." Teaching the "principles of learning" to potential teacher's aides is not apt to have much effect on their performance unless the principles are applied in a variety of practice situations or related to past experience. The relationships of these principles to the teaching process must also be evaluated and emphasized.

In teacher's aide training, there is a need for instruction that facilitates transfer of learning from one situation to another. It should be remembered that there is a wide range of activities in the fields of education and library science. Sometimes, aides are placed with new teachers, and are transferred to new situations, in which they may then be working in such areas as audio-visual or administration. These positions do vary tremendously. It is not enough to know the specific steps of procedure for a given task in teaching. The principles and the *"why"* must be understood if the student is to adjust to a changing situation with a minimum of further training or field support.

Methodology of Teaching. There are several methods of aiding the transfer of learning that can be applied by instructors and aides. Procedures that can be applied to aid the positive transfer of learning include:

- Stress the underlying principles and ideas of what is being learned and make sure the students fully understand the concept; they will then be able to apply the principles to new tasks or subjects;
- Help the students to see the relationship of parts of the subject or material being taught to the other parts;
- Let the students know when to expect transfer situations in training and how to facilitate the transfer;
- Use realistic problems, discussion, and leading questions to give practice in transfer situations;
- Pay attention to *how* the student learns and the approach he takes to problems as well as to his results.

Negative Transfer. Under many circumstances, skill in one activity or one way of doing something may actually interfere with learning a new skill. This is called *negative transfer*. There is research evidence to show that one should not attempt to learn two very similar languages at the same time because the result is a negative transfer or nonlearning. The one activity actually slows down or completely stops the other learning activity from being acquired.

PLATEAUS IN LEARNING

Plateaus in the process of learning are like the landings in a long flight of stairs. Not all learning curves show plateaus. They are particularly evident in the development of high degrees of skill which are becoming more common in the public educational system. Once students have mastered the steps of procedure for performing a skill, they may become discouraged because they do not seem to be making further progress toward a higher degree of skill. One cause for this leveling off effect may be that, although the students know how to perform a skill, they have not practiced it enough to make it a habit.

An additional cause of a plateau may be the result of the student changing his mode of attack on the problem. When the student is first making these transitions he may show no apparent improvement in performance. Students in teacher aide programs should be informed of this learning characteristic and its causes so they can recognize that it is a natural event and something experienced by everyone who strives for perfection.

The answer to overcoming learning plateaus usually lies in continued practice. As practice is continued and coupled with a strong motivation to learn, the process will gradually become just as automatic as walking or talking. At this point the particular skill is said to be *internalized;* it is a part of the individual's behavior.

Several plateaus may be encountered in a lengthy training program along the road toward student acquisition of a high degree of skill. Teachers and teacher's aides should:

- Recognize the existence of plateaus,
- Inform students of plateaus and of the need for additional practice when they are encountered,
- Provide encouragement and opportunity for continued practice until the steps of a given procedure become so automatic that the student can concentrate on the next phase or level of achievement,
- Help to increase the student's understanding of the task.

If plateaus are of long duration, it may mean that improper habits have been formed. For example, students may try to learn subject matter beyond their potential ability, or the instructor may not be giving the needed assistance and motivation.

Emotions (such as fear, hate, and boredom) may cause plateaus in learning because the students' minds are not free to concentrate on the subject matter being learned. Instructors and teacher's aides must be conscious of such possibilities.

INDIVIDUAL DIFFERENCES IN LEARNING

To understand individual students, two truths must be recognized:

- First, they are all different with individual motivations and abilities;
- Second, to a large extent, teachers are unaware in what way, to what degree, and why, individuals are different.

Each individual is acting and reacting in an environment as seen from his own point of view; hence, each individual student can be understood only through careful observation, thought, and insight. A good instructor or aide should consistently observe, listen to, and try to understand each student. This is especially important for preschool teachers.

In casual thinking about learning and teaching, the tendency is to visualize an instructor and a group of students; the one teaching, the other learning. But, *the teacher and the aide must understand that each individual in the group is having an individual learning experience.* They must decide which students need guidance, encouragement, extra instruction, more practice, or more challenging assignments.

In short, all people connected with instruction must come to understand each student as a unique person and this knowledge must help to determine the approach and method to use in the teaching procedure. This is one reason why large classes in many public school settings are not very successful.

The differences in students are remarkable. They differ in physical characteristics - height, weight, length of legs, color of skin, eyes, hair, size of the head. They also differ widely in their mental abilities, their interests, keenness of their senses, emotional stability, muscular coordination, and backgrounds. As a result of basic aptitudes, training, and experiences, they differ widely in what they have learned and in what they can do.

Aptitude. *Aptitude* refers to what a student may eventually be able to do. A student may have an aptitude for park work, but may not be able to utilize a simple hand tool because of lack of training. *Aptitude then, is the capacity to learn; it is the potential for built-in characteristics that can be developed through training and experience.*

Ability. When teachers utilize aptitude tests, of which there are many types, they are attempting to measure or predict what a student can do with proper training. Aptitude refers to la-

tent or potential ability. Ability refers to what can actually be done, as constrasted to aptitude. It refers to what a student can do after he receives training. *Ability means demonstrated performance after training and over a period of time.*

Achievement. *Achievement refers to the present; it is acquired ability.* When a student receives a high grade on an examination, this is evidence of achievement as measured by his instructor's standards. A good aptitude test given, perhaps years before the training program, would have predicted the student's performance.

Reasons for Non-Achievement. When an aptitude test predicts success but achievement does not occur during training, it is usually because of the student's lack of interest in the subject matter, the instructor's methods, and perhaps other factors that affect what the student does with his aptitudes.

If a student receives high evaluation in Social Studies but not English, this may signify a difference in his aptitude for the two subjects. However, it may indicate that one teacher is doing a better job than the other. It may also be that one instructor uses more difficult evaluative devices than the other. All of these factors must be considered in understanding the progress or lack of progress of any individual student.

Physical Differences. Teachers, and others involved in the learning process, should be aware of physical characteristics and learning. Physical characteristics, such as the shape of the head and brow, the size and shape of the nose, and color of skin, in themselves do not determine the individual's aptitude for learning. They may, however, have an affect on how the student learns in some situations.

Some characteristics may cause the student embarrassment and prevent him from fitting in naturally with the group. This, in turn, may result in emotional reactions that have a significant effect on learning. *Unfortunate social experiences caused by the reaction of others to the student's physical characteristics or home background sometimes lead to learning or behavioral difficulties. It is critical that all people involved in education be alert to the possibilities of this happening, and be able to promptly take whatever action they can to help the individual fit into the group in a normal way.*

It should be pointed out that most preschool training programs are composed of children with very diverse interests, backgrounds, and abilities. Preschool training programs tend to be action oriented and involve the learning of a great many

skills. Physical characteristics such as size, strength, visual acuity, manual dexterity, etc., can, to a very large extent, influence a child's performance.

Sexual Differences. A student's sex, to a limited extent, will also affect the rate of learning in some physical education programs. In addition to the obvious physical differences between male and female students, there are other differences. Men usually test higher in mechanical things. Probably most differences in male and female students, except in physical strength and related characteristics, are due to training and experience. This is not to say that females should not or cannot perform physical work. It does mean that females, in a training program together with men might require a somewhat different *learning situation* than would be given to the males.

Training and Individual Differences. In all training, it is necessary to contend with built-in individual differences in students. Training will not erase the differences in individuals who have different aptitudes and different achievement levels. In fact, training usually causes a noticeable difference between students regarding achievement.

Experience and research indicate that the student with the greatest aptitude for the job is able to do the work better at any stage in the program. He can also learn more from whatever training he receives. Training will improve the performance of every individual in a classroom program, but it usually has the greatest effect on those who have consistently demonstrated good achievement.

THE LEARNING ENVIRONMENT

The learning situation, or environment, can and does affect the process of learning. The nature of an effective learning environment can be illustrated by the description of two contrasting preschool programs.

Environment of Confusion. In the first program, there are groups of children pushing their way around a few congested areas. They are crowded in front of the tool room and the garden plots. There is the quiet sound of voices in a reading class. Next to the reading class, there is a noisy arts and crafts area.

A preschool teacher moves from one child to another, taking garden tools out of each child's hands. He performs a quick

task and gives hurried instructions to his aide. Wherever he stops, a group of children crowd around to ask what they should do next.

No one seems to have the materials needed for the task. A reading instructor has seven children watching him explain a point by illustrating on a piece of notebook paper. Equipment and chairs appear to have been left outside during bad weather.

A staff member stops to comment about the heat of the day and the lack of ventilation. He says the classrooms are too dark in the early morning or evening for classes. The children just don't care to learn anything.

Environment of Pre-planned Order. The second preschool program presents a different picture. There are open areas with designated and separate spaces for quiet and noisy activities. The few small classes visible are spaced to ensure a minimum of distraction. Each child in the reading class has a chair and a notebook. The instructor has a portable blackboard. Now the children can easily see what their teacher is doing.

A group of children going to their garden plots are carrying their tools and looking forward to playing in the garden. The senior preschool instructor is reviewing with the several staff members how they can assist in the next hour's instruction. It is evident from the children's actions that this atmosphere is common. Later observation in the garden reveals that several plants are in different stages of growth. A child proudly explains to a visitor how he grew his own plant. The children are busy and happy. There is little evidence of wasted time.

What makes the difference in the two programs? A review of the techniques of management and the arrangement of *preschool oriented learning facilities* provides much of the answer:

Classrooms - It is best that rooms be well ventilated. It is often desirable to have the window or door open prior to a class. Prearrange chairs according to the type of instruction planned, and be sure that chairs, desks, tables, etc., are clean. Arrange materials of instruction neatly on walls and on bulletin boards.

Tools and Materials - In an effective learning environment, tools are available to the children when they need them. Common tools used frequently by children are at locations where they work; large tools are kept in a toolroom. The types of tools used are simple, basic, and safe for young children. The method used to store and maintain the tools is a result of discussions with the staff and children; the children are responsible for the tools they use.

Less Distractions - Care is exercised to prevent noisy discussions that might interrupt classes. Instructors are called from their classes only in the event of an emergency. Classes in progress are rarely moved because it causes distractions. When there are unavoidable disturbances, such as repair work that must be done nearby, the instructors are prepared with additional teaching methods (i.e., sketches, problem solving, or individual work).

Location and Accessibility of Preschool Facilities - Chairs, tables, water fountains, and toilets must be the appropriate size for children. Toys should be stored within easy reach of the children. Equipment in a preschool must be accessible to the children. The specific location of gardening or other facilities depends on the training site and the program.

Meal Periods - Meal periods are a time of learning too. The staff should eat with the children whenever possible. Young children learn much by observing, and good table manners can be taught this way. Accidents will happen during meals; and should be the cause of as little scolding as possible. Children must learn to associate meal periods with positive feelings.

Rest Periods - After the noon meal is a good time for a rest period. Young children need to sleep. While older children (5 to 7) may not need to sleep, they can be encouraged to rest or relax by reading, or other quiet activities.

RELATIONSHIP OF SCHEDULING AND LEARNING

Scheduling is the process of making the best use of all the different elements that make up a training program: instructors, aides, students, work loads, equipment, supplies, and space. Good scheduling leads to economical uses of these factors to facilitate maximum learning.

In public-school programs, it is not desirable to lay down or follow rigid rules for scheduling. Two programs, identical in purpose for the same school district, will not necessarily have the same schedules. Such things as availability of equipment, classroom facilities, staff variables, and student levels are never the same. Teachers and aides should be aware of some of the fundamentals of scheduling, which are useful as guidelines when drawing up, or modifying, schedules. These fundamentals include:

Relationship of Theory to Application. There should be a definite planned relationship between theoretical work and application. Theory is necessary to provide the student with a basic understanding of the practical work, and to provide

information necessary for applying judgment as the practical situation changes. It is usually best to teach theory first, and to follow immediately with practical work, spacing the theoretical instruction throughout the program.

Pace of Instruction and Learning. A major scheduling problem concerns the decision of whether to cover a great deal of material or to cover less material and provide for more discussion. Teachers are frequently under pressure to include the maximum amount of subject matter for each hour in the schedule. The time allowed in the schedule for putting newly acquired knowledge into practice and thereby strengthening the learning by doing is frequently challenged by those who wish to expose the students to a great amount of material in a short time. There is no satisfactory solution to the problem.

However, *teachers and aides should remember that research has strongly indicated that students can learn more when less material is covered.* Schedules crowded with lectures, demonstrations, and field work often result in little learning, since not enough time is allowed to digest and apply the material.

Breaks and Study Periods. Occasionally in public schools, two or more hours are combined into a longer period by eliminating the normal break between periods. The advantages to this approach result primarily in providing large blocks of time for instruction that requires more than a one-hour period. It is argued that there are large amounts of time lost due to the starting and stopping of instruction for the break period; and this may be true if large amounts of equipment are put away after each short break. Of course, this situation is easily remedied in a well structured program.

Students should receive a break of approximately ten minutes for each hour of instruction. Breaks given on the hour have a definite training significance in that more may be learned, digested, and retained.

In addition, they should receive at least one hour of study time for each ten hours of instruction. It is recommended a distinction be made with the students regarding the difference between study time and free time. The former is a period for study, reflection, or discussion, while the latter is just what it implies: free time.

Excessive Scheduling of Time. Excessive hours of instruction are wasteful of student and staff energy and do not increase learning. It is doubtful if students can concentrate for more than eight instructional hours per day.

There are, of course, exceptions to this which occur when students are performing practical activities in addition to classroom work. With the stimulus provided by practical work in public-service programs, it is sometimes possible to have an instructional day of ten hours.

Instructional weeks should not extend beyond 50 hours. Exceeding this time limitation leads to morale problems with the staff, a lessening of student learning and retention, and increasing physical debilitation with each extra week for everyone involved in the instructional process.

Time of Day and Learning. Some consideration should be given in scheduling to the fact that student learning is accomplished more easily at certain times of the day than at others. This will vary with individual trainees, some of whom work better in the evening, while others do their best work in the morning. In general, however, the best learning results are obtained when the most detailed and difficult activities are scheduled in the morning.

The period of time just after the noon meal is not usually satisfactory for showing films or lectures.

Experience suggest there are other time considerations that are important for scheduling. Students can only work for short periods on very difficult assignments.

STUDENT LEARNING ACTIVITIES

- Prepare a personal definition of what human learning means to you.
- State at least three examples of trial and error learning.
- View and discuss filmstrips *School Skills for Today and Tomorrow*, and *How to Take a Test*.
- Compare the advantages and disadvantages of learning-by-observation with learning-by-doing.
- Define positive and negative transfer in learning, and give examples of each.
- View and discuss films on learning: *Alice: A High School Junior*, *Keith -- A Second Grader*, and *Learning About Learning*.
- Listen to sound filmstrip *How to Study* and be prepared to discuss learning afterwards.
- Explain how individual differences in learning ability can affect learning.

- List some possible explanations for plateaus in learning.
- In small groups, discuss how the learning environment can affect learning performance.
- Debate the following statement: *Class scheduling has little, if anything, to do with effective learning.*

TEACHER MANAGEMENT ACTIVITIES

- Encourage each student to prepare a personal definition of what human learning means to him.
- Discuss with students examples of trial and error learning.
- Show filmstrips: *School Skills for Today and Tomorrow*, and *How to Take a Test*. Discuss learning skills afterwards.
- Ask students to discuss the advantages and disadvantages of learning-by-observation with learning-by-doing.
- Have students define and list examples of positive and negative transfer in learning.
- Show and discuss films on learning, *Alice: A High School Junior; Keith -- A Second Grader*, and *Learning About Learning*.
- Show the sound filmstrip *How to Study*, and lead a discussion on it.
- Divide the class into small groups to discuss individual differences in learning.
- Explain learning plateaus, and have the students list possible reasons for them.
- Have the students discuss how the learning environment, or situation, can affect learning performance.
- Have the class debate the following statement: *Class scheduling has little, if anything, to do with effective learning.*

RESOURCES

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Unit 3

THE DISADVANTAGED STUDENT

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Unit 3

THE DISADVANTAGED STUDENT

INSTRUCTIONAL OBJECTIVES

1. Ability to describe special needs of students who are likely to be disadvantaged in a regular classroom.
2. Ability to understand causes of the educationally disadvantaged student's difficulty in school.
3. Ability to recognize problems in skill development which the disadvantaged student is likely to have in school.
4. Ability to observe and evaluate classroom events from the viewpoint of the educationally disadvantaged student.
5. Ability to suggest ways in which a teacher's aide might assist disadvantaged students in the instructional program.
6. Ability to perform semi-instructional tasks and to prepare supplementary materials related to helping disadvantaged students overcome a handicapping condition.
7. Ability to appreciate the challenge and worth of teaching disadvantaged students.

CONTENT

INTRODUCTION

Each September, in classrooms all over the nation, students and teachers from relatively affluent backgrounds meet children from their own communities who are poor; or whose skin color, dress, or ways of speaking are different; or whose life styles and attitudes do not conform with the *mainstream* of American life. These children, while neither superior nor inferior to most children, are different from them and have their own special problems and needs. In the eyes of the teacher, these children are seen as different. They are the

disadvantaged students in the classroom.

Children whose homes and cultural backgrounds are not in the mainstream of middle-class America may get very little out of a traditional American education - unless new approaches are used to try to understand and provide for their special needs. The use of teacher's aides is one of the special services designed to help bridge this cultural and socioeconomic gap. Young people working in this new kind of classroom job can help in many ways to meet the special needs of the disadvantaged student. By assisting with the tutorial and semi-instructional tasks, the teacher's aide frees the teacher to give more attention to individual students.

This unit explores reasons for some of the problems (and their causes) disadvantaged students have in school, and suggests approaches for helping these students, with answers to such questions as:

- Why do some students appear to be *unteachable?*
- What causes behavior deviations in classrooms that make it hard for teachers to accomplish an instructional program?
- What are some of the things the teacher's aide can do to assist the teacher to reach the goals of a program?

SPECIAL PROBLEMS OF THE DISADVANTAGED STUDENT

Entering School. When a child enters school at the age of five or six, he has passed through a formative period of his life, and many experts believe that his personality is fairly well established. That personality is made up of a number of different things: the way he talks, the things and people he likes, what he thinks he can do, what he laughs at, and the things that make him sad or afraid. When he walks into the classroom for the first time, away from the support of friends, family, and home, his personality and his sense of himself are all he has to rely on.

What may happen to the disadvantaged student in his first days at school? He may find that what is expected of him, the way he is supposed to act and speak, and the way people think, may be quite different from what he has known at home. The teacher may want him to talk, act, and understand things which are totally unfamiliar to him. He may even be criticized or scolded for not meeting these strange and sometimes threatening demands.

Feelings about himself. Feelings of shame and inferiority, bred by the pain of being different, may decrease his ability to relate to teachers and fellow students. He may make a con-

nection immediately between things that are different about him and things he is criticized for. The disadvantaged student may interpret any small failures he has during the first days in school as a personal attack on him and his family. The anxieties fostered by the demands of being two kinds of person at once - one kind at home and another at school - are difficult for a young child to understand.

Language and Communication Skills. Confrontation with the conflicting demands of home and school is likely to occur first in the area of speech. *The development of a child's speech is closely tied to the development of his mental capacities and his cultural background.* Learning how to form sentences and learning how to think are believed to be part of the same process. As a child grows and matures, the growth of his intelligence is shown in the expansion of his communication skills. He learns to communicate and express himself by testing words and sentences on his family and friends. The words and sentences that work - that are accepted and responded to - are the same words that become part of his thought processes.

The words and sentences that work in the home of the disadvantaged child may be very different from those that are accepted and responded to in the classroom. Certain grammatical constructions and figures of speech that are commonly used in his home may be accepted or scorned by the teacher. On the other hand, the formal or textbook English he is required to use in the classroom may not be accepted in the home. Teachers may be really shocked and offended by deviant words spoken in the classroom. A negative reaction to his language from teachers and classmates may seriously affect a young student's self-confidence, leaving him ashamed to ask or respond to questions in the classroom. Speech problems might result, such as expressing his resentment of the teacher who humiliates him by deliberately using language not familiar or acceptable to the teacher.

A young child whose first words in the classroom receive no response or are rejected outright may retreat completely from contact and participation. Thus he becomes a problem for the teacher, who may already have too many students in the classroom, too few supplies, too much paperwork, and too little time to spend teaching even the least troublesome students. A child who withdraws and apparently refuses to learn may not get the individual attention he needs to bring him back into the group. Thus, at the age of six, the child may already feel that he has been put aside, and left (in his mind) with the prospect of ten or twelve years of school to *get through* until he can legally dropout.

Tardiness. The matter of communication skills is not the only

area where the disadvantaged child is likely to encounter a school-home conflict. Other behavioral patterns and attitudes established at home may not get a favorable reception in the classroom. For example, a deprived child is likely to run into trouble almost immediately over the concept of being on time.

The so-called middle-class home generally runs on a schedule. The typical middle-class child has specific times set in his day for eating, sleeping, and playing. He knows that getting things done on time is very important to his parents and, because he wants to please them, he tries to be punctual.

The daily life of the economically disadvantaged child probably has not been so closely supervised. Both his parents may work, and for much of the day he may be left on his own. Naptime may not be observed, and bed and mealtimes may vary from day to day. Some experts on child care feel that this sort of freedom may be good for a child, teaching him responsibility, how to plan ahead, and so forth. But it may not be adequate preparation for the often rigid schedule of the classroom.

To the child who hasn't previously been required to be on time, punishment by a teacher for tardiness may seem to be out of proportion to the offense. Thoughtless disciplining of the late-comer - whose tardiness may be the result of many conditions at home - can add to his confusion, fear, and lack of self-confidence.

Tidiness. In addition, most teachers think it is especially important to maintain order and tidiness at all times. Structure is very important in their minds. They are likely to be pleased with students who keep their desks, notebooks, and supplies neat, and equally displeased with students who do not. But children who do not have many possessions of their own to care for before they start school may not have a chance to develop the habits of neatness and care of personal property that the teacher will demand.

In many American homes, a child is taught to be tidy and to take care of his possessions. If he has not been taught these habits and skills, it is not the child's fault if he cannot do what the teacher expects. He is likely to think that the teacher's disapproval means he is being rejected because of his background. The teacher, on the other hand, may believe that the student is being willfully disobedient by deliberately challenging order in the classroom. Each resents the other, and neither will give in. Communication, let alone teaching and learning, is difficult under such circumstances.

Lack of Interest. It is not only in such behavior as speech,

promptness, and neatness that many teachers find the disadvantaged child deficient when compared with the *model* pupil. Even when open conflict does not take place, some teachers still find it hard to communicate with some students. There are a number of reasons for this, but the one heard most often is that such children are indifferent or hostile to the classwork, learning little and testing poorly.

Why hasn't the school curriculum been able to reach the student with learning difficulties? It is certainly not because he is inferior or unable to learn. Is he simply not trying? Is the teacher at fault? Or is the curriculum inadequate?

Education does not begin in the classroom. By the time a child reaches school, he has learned a great deal and has formed basic attitudes and assumptions about the world around him. At school, these attitudes and assumptions will be either reinforced or challenged - by books, teachers, and other students. *If the set of values generally accepted in school is very different from the one at home, the student may be in for some difficult times.*

Consider the Dick and Jane reading primers that are used in many classrooms. They picture happy *white* children and their pets living comfortably in the suburbs and enjoying themselves in a setting of green lawns and tree-shaded streets. What is a child brought up in an urban ghetto or on an isolated Indian reservation going to think of these stories and pictures? Will these stories have the same meaning for the disadvantaged student? They certainly don't reflect anything he can identify from his own experience; he may never have seen the kinds of houses and neighborhoods that are described and presented as typical.

Even very young children may wonder why the crumbling tenements, the leaking roofs, and the jobless fathers that he knows about are not found in this classroom picture of American life. Dick and Jane's father leaves every morning for work wearing a suit and tie, and it never rains on their freshly painted, white house. It may appear to a young black child, for example, that it is because Dick and Jane are white that their days are so carefree. For many reasons their life, in the book, appears to have little to do with his - why should he read about them?

Because many of the books that are read in school do not reflect his life, the disadvantaged child is not likely to show the enthusiasm and interest about learning to read that a middle-class child often feels. Also, he may not have been read to, or been given prereading picture books before he entered school, and thus will need more preparatory work than the child who has had these experiences.

Unfortunately, the teacher may not have the time or training to give such a student the extra help and motivation he needs. Expected to read before he is ready, this child finds it a hard and often painful activity. If he doesn't quickly make up for the disadvantage of little early reading exposure, he will soon be labelled a *nonreader*, or a reading problem, and placed in a class of children presumed to have the same difficulties. This can only have self defeating consequences for the disadvantaged child.

Intelligence Tests and Grouping. Most schools group students by ability to some extent. Groupings are usually made on the basis of IQ tests; ability grouping is still an accepted practice. Teachers claim that a class of students with similar abilities is easier to teach, that it can move ahead as a group without straining the slow student or boring the bright one. On the other hand, opponents of the system say that it is unfair, because it evaluates students according to unreliable test scores and tests which are culturally biased.

What about the validity of test scores? Do they really measure what they claim to measure? IQ tests measure a student's level of academic development compared to standards established by averages of a typical group. The individual is then compared to this reference group. There is no standardized test in general use that accurately measures his potential. Yet IQ test scores are generally used for this purpose. Moreover, the tests use questions that are supposed to be understood equally by anyone, no matter what social or economic group he comes from. But, in reality, most tests are based upon the culture of the white middle class. Thus, a student's score on such a test depends partly on his familiarity with middle-class culture.

What is the result? Students from disadvantaged backgrounds often are inaccurately evaluated as low in intelligence and ability, and are placed in nonacademic or special groups where their opportunity for equal education is quite limited. The injustice of this is easy to see. The schools are not offering many disadvantaged children a real opportunity to escape from poverty. *Children who fail in school all too often grow up to be jobless adults whose own children have an even smaller chance to improve their life style.* The schools must take the lead in breaking this cycle.

Reactions to Teaching. Most children have already learned a great deal by the time they enter school. Learning happened naturally and easily before school, with television playing a significant role in this respect. When the child enters school, he may find that a totally different kind of learning is going on. He may not feel comfortable with the structure

of school learning. There is a hard edge to it - the threat of failure and the fear of not measuring up. In many classroom situations, instead of learning, *he is taught*. He is not moving out toward knowledge; instead, it is presented to him as a member of a class. If he cannot absorb it in the way it is presented, he may not have a chance to try it a different way. In most instances, the instruction is not individualized. He cannot draw back and try to approach the lesson from a new angle; he cannot start from an earlier point and go more slowly. The disadvantaged student is expected to learn at the rate of his school class. Somehow he must open up and receive it; yet it will never be truly his as it would have been if he had reached out for it and expanded naturally toward it.

The unnaturalness of learning in this way is often expressed in visible actions. The student fidgets in his chair, chews on a pencil, looks out the window, talks loudly, shuffles his feet, and shows other signs of real discomfort; the teacher will perceive this as inappropriate behavior. The student cannot sit quietly and digest what the teacher is offering, nor can he get up and leave the class. But he will not be forced, gently or with threats, into quietly receiving knowledge from the teacher's lectures. In small and large acts of defiance, he asserts himself against the school. He ignores the teacher or, as he grows older, he may threaten the teacher physically, because he cannot be *made* to learn, and he wants the teacher to know that.

Other students will usually accept a lesson quietly and with little apparent difficulty. Only later does it appear that the student has not really learned the lesson well enough to use it. For example, a pupil who gets 100 percent on a spelling test cannot spell the same words correctly in a composition. Another who has mastered the sing-song recitation of the alphabet cannot answer the question, *What letter of the alphabet comes after Q?*, without singing through the letters until he finds the answer.

When they are marked wrong or criticized on their performance, these students are very resentful; they think they have been tricked or treated unfairly. They know the lesson as it was presented, and, to prove it, they can turn in another perfect performance on the spelling test and sing the alphabet straight through without a mistake. What more is necessary? To these students, classroom learning is like a game of *catch*. The teacher passes the lesson to the student; the student catches the lesson and throws it back to the teacher on demand. The lesson seems neither real nor important to the student; to him, the exercise of catching it and passing it back unchanged is what school is all about. Such a student wishes above all to be accepted by the teacher. He tries to play by the system's rules in order to gain that acceptance and avoid conflict.

In contrast, *the rebellious student sees conflicts as opportunities for self-assertion.* He tends to define his own interest as completely at odds with the goals and values of *the system* and the teachers, policemen, and welfare workers who are its representatives. He gains self-esteem by fighting against what he interprets as the attempts of that system to put him down or treat him unfairly. In every confrontation with authority figures, he feels threatened and hostile; he feels that to give in and play the game would signify weakness and defeat.

- Can the middle class communicate, through the public schools, with students such as these?
- Can the student be convinced that school is a relevant and worthwhile activity?
- How can teacher's aides help improve the quality of education for disadvantaged students?

The balance of this unit is devoted to an attempt to answer these questions.

TEACHERS' AIDES IN NEW APPROACHES

The public schools can use teachers' aides in many ways to help meet the special needs of the disadvantaged student. The situation requires not simply more classrooms and teachers, but totally new approaches to educating the disadvantaged. Teacher aides can play an important part in implementing these approaches.

Improving Communications. Teachers and school administrators will find difficulty in communicating with disadvantaged students unless they are able to understand the life of the deprived child. Books such as *The Autobiography of Malcolm X* might well be valuable source material for all instructional personnel dealing with disadvantaged students. The churches, shops, music, and speech of the ghetto are as foreign to the average teacher as suburban shopping centers and tree-lined streets are to the child of the slums. Both teacher and student must know, understand, and appreciate the whole picture of the American community.

Teachers' aides can help build a bridge between teacher and student. If the aide comes from the same neighborhood as the students, he can help the teacher understand and communicate with them by interpreting verbal expressions, describing local personalities, and by pointing out neighborhood problems the teacher doesn't know about. The aide can tell the teacher that Kenneth, the quiet boy who never pays attention, gets up

at 4:30 a.m. to deliver papers in order to supplement his mother's welfare check. The aide can help the teacher understand the people behind the faces in the classroom; why they act the way they do; what their fears and joys are; why they seem resentful, unresponsive, or afraid.

A teacher aide who relates to the students outside of school is accepted more readily than the teacher from another part of town. The aide is one member of the system with whom they can talk and who understands their viewpoint. In addition, they may well be proud of the aide as an example of how a person from their own background can succeed.

Students who know the aide from the neighborhood may try to challenge the aide's authority, and the first days in the classroom may be complicated by attempts to get the aide to take sides against the teacher. Thus, *the teacher's aide must be an expert negotiator, well aware of the limits to his authority and freedom in the classroom. He can interpret classroom problems and complaints, but his value in the classroom is lost if he rebels against the authority of the teacher.* As an employee of the school, the aide is responsible for following the instructions of the supervising teachers. Aides who find that they cannot get along with a teacher should be transferred rather than risk the possibility of open conflict in the classroom. Such insubordination would persuade the students that the system is not responsive to their needs.

Monitoring Health and Nutritional Programs. Many schools are cooperating with the public-health departments in programs to meet health and nutritional needs of students. Educators realize that a hungry or sick child cannot possibly do his school work as well as if he were properly fed and healthy. Much of the listlessness and inattention that teachers see in children is caused by unmet health and nutritional needs. These needs can become so severe that mental retardation and physical handicapping will result if they are chronically neglected.

Teachers' aides can help to implement and administer these health programs. There are records to be filled out, students to accompany to the nurse or doctor for shots and examinations, and parents to be consulted for permission to examine and treat their children. These tasks are usually done by the teacher. Most teachers would appreciate assistance in these tasks, and teachers' aides are often the answer. Under the teacher's supervision, the aide can prepare each student to participate in the prescribed program.

In addition to medical programs, some schools have free meal programs. Students from poor families receive lunches (and sometimes breakfasts) free, or for a small fee. These programs require some paper work, which the aide can help do.

He can also discover those eligible children who are not receiving the free meals, and give this information to the proper authorities.

Establishing Confidence in the Students. Because of fears fostered by segregation and unstable home lives, many disadvantaged children enter school with serious emotional problems. Instructional personnel should be extremely patient and understanding with these students, encouraging them to express themselves and gradually providing them with new experiences and ideas, even if this means providing special services. Disadvantaged children, perhaps more than any others, need to feel that they are liked and appreciated for themselves. They are likely to think they are failures as people if their work is not as good as it should be. Thus the teacher and teacher aide should emphasize *success*, congratulating and praising the child for what he gets right, rather than rebuking him for his errors.

Establishing Trust in the Students. The disadvantaged student's reluctance to trust the middle-class world, to believe that it will deal any differently with him than it has with his parents, is hard to overcome. It is possible, however, to create an atmosphere in the classroom that is flexible enough to accommodate this student, and prove to him that the hours spent in school need not be a waste of time.

Establishing this trust takes time, and most teachers simply haven't enough hours in the day to give the required individual attention to each student. This is why teacher's aides can be so helpful. Well-trained aides can assume many of the time-consuming tasks that take teachers away from the business of teaching. They can take attendance, mark papers, distribute materials, and supervise daily activities. Under the direction of the teacher, aides can work with small groups of students in many helpful ways, while the teacher works with individual students or moves from group to group, giving particular attention where it is needed most. The aide may work with a student who is having particular difficulty with his lesson, offering encouragement, smiles, and affection to help him get over his fears. Even when not actually instructing, the aide can help the pupil gain the self-confidence that is a necessary first step toward being able to learn in school.

Making the Curriculum More Relevant to the Students. If a teacher of educationally disadvantaged students listens to the people in his classroom, he cannot help being aware of the conflict and hostility in their lives. Many teachers try to ignore this aspect, and to create a classroom environment that will be like an island of peaceful intellectual efforts

in contrast to the squalor and poverty of the street. But if the students cannot bring the reality of their lives into the classroom, they are not likely to take the peace and poetry of the classroom home with them after school.

Free discussions about local conditions, discrimination, and poverty (if conducted without rancor or hostility) can bring the conflict into the open, where it can be examined and turned to productive ends. Teacher and student can become real people to each other, involved in the same concerns, and able to talk freely. Hostile young students can be led, under thoughtful and understanding leadership, to see possibilities in a system that had seemed completely closed and inflexible.

One of the best ways to bring the real world into the classroom is to use teaching materials and topics of study that are part of that world. Teachers and teacher aides can collect and distribute reading materials on topics of general interest. Teachers can also ask students to write their own books. [36] *Children*, a book listed in the Resources Section of this unit, describes the success of students in a Harlem school who listed their experiences at the request of their teacher. It also includes some examples of their work.

Schools need material on minority groups in American history courses. In most school systems, the rich and fascinating history of Afro-Americans, Indians, Asians, Mexican-Americans, and others in this country, is barely touched upon, the entire emphasis being given to the saga of the Anglo-Saxon founding fathers. To tell the whole story, many teachers need to do independent research, and to prepare supplementary materials to make up for the gaps in standard texts.

Teachers' aides can help the teacher prepare this supplementary material. The aide can assemble teaching bulletin boards and other audiovisual materials; reproduce supplementary maps, texts, and charts; locate books in the library; and play tapes and records the teacher thinks are relevant. The aide might also help the teacher set up a classroom library of paperback books that are of interest to the class.

<u>Making the Curriculum More Interesting to the Student</u>. In addition to bringing new topics and learning materials into the classroom, instructional personnel should experiment with other ways to make the standard curriculum more interesting and appealing to the disadvantaged student.

For instance, many educators say that disadvantaged students prefer practical studies to abstract and conceptual work. This means that such students are more likely to show interest in *learning to do* something than they are in *learning about* something. While it is not always true, this observation

seems to suggest that disadvantaged students need to accomplish set tasks, and to see concrete results come from their efforts.

The indifference often shown by disadvantaged students toward such subjects as classical literature and history presents a problem to the teacher. Should he put Dickens away and concentrate on mystery stories? Or should he assign the Dickens and get through it somehow with those members of the class who show at least some interest? Too often, the problem is resolved unsatisfactorily by limiting the curriculum to basic education: the three R's, and barely adequate vocational training. Thus, the schools produce another generation of citizens whose meager educations have prepared them to fill only the same jobs and social positions available to the uneducated.

The good teacher will not take the negative attitude of his students toward the "so-called" *finer things* at face value. Realizing that they need realistic and achievable goals and regular reinforcement and success, he will adjust the curriculum to meet these needs.

Instead of requiring the whole class to read undesired texts and take periodic exams, with occasional book reports and essays thrown in for variety, the teacher can create three-dimensional subject areas, offering something for everyone. Taking a certain text or skill as the goal, he can suggest a number of different ways to approach that goal.

Some students will want to devote their time in class to quiet reading and individual research on the subject at hand. Others will want to be more active, doing projects and experiments. A certain common body of knowledge and experience will be expected from everyone, but each student can go beyond that common knowledge in the ways that interest him most. The students will find that they need and want to learn basic material to use as tools in pursuing their special interests, but the final exams become (for many) secondary goals in contrast to the self-fulfillment and satisfaction of following through on their own projects.

Encouraging Special Interests of the Students. Above all, the good teacher will be alert to the interest shown by the class. He will recognize when he is boring them or cannot hold their interest, and he will adjust his teaching accordingly. He can encourage the students to make suggestions for additions to, or changes in, the curriculum. He can offer them a choice of their suggestions and allow the class to group itself into smaller units to pursue special interests and projects.

Expressing a special interest and a desire to learn about a certain thing may be very difficult for a disadvantaged student. He may not be accustomed to having his questions

answered, and may feel very vulnerable and afraid of being rejected. Thus, any spark of curiosity in a usually unresponsive student deserves special attention from both the teacher and the teacher aide. Even if his curiosity is about something not usually included in the lesson plan, the student can pursue his interest as a special project on his own in class.

By encouraging the student who wants to move away from the class to follow a special interest, the teacher can direct his negative attitude about the standard course of study into a productive channel. His hostility toward the teacher may make him work all the harder to prove that his low achievements are the result of only the boring stuff he is usually asked to do and not based on a lack of ability.

When the disadvantaged student is encouraged and supported, his eagerness to follow up on his interests may produce work that shows better reading and writing ability than either he or the teacher expected. With new confidence, his former hostility may decrease, revealing that it was a defensive reaction against the fear of failure. Now that he recognizes he can really learn something, he is ready to believe that time spent in the classroom can be relevant and worthwhile.

The classroom where many students are enthusiastically engaged in individual and group projects at the same time is not going to be a model of neatness and discipline. Activities such as role-playing, writing plays, and constructing models are noisy and hard to supervise. The teacher who encourages activities like these needs a lot of help in order to avoid being bogged down and forced to return to a more rigid format. Teacher's aides can give that help.

THE AIDE'S CONTRIBUTIONS IN SUMMARY

Well-trained teacher aides can have remarkable success with disadvantaged students. The appropriate blend of training and background will prepare aides to recognize and understand the special problems of children brought up under conditions different from those of the typical white middle-class American child. Teacher's aides can help the teacher understand and deal with these problems, while freeing him from many time-consuming tasks. *The aide's contribution of energy and ideas will give the teacher time to teach, enabling him to try new approaches and reach many students whose needs require more individual attention than he is now able to give.* The work will not be easy, but the aide can help make a big difference in the quality of education his school offers.

STUDENT LEARNING ACTIVITIES

- Write your definition of a *disadvantaged student*.
- Describe an instance in your own childhood when you felt disadvantaged as a student - the causes, your reactions, and the results - as you remember them.
- Note ways in which the television programs you have seen might be interpreted by a disadvantaged student.
- Analyze a traditional American folk tale or song (e.g., *Little Black Sambo*, the story of Custer's last stand, the *Star Spangled Banner*). How might a disadvantaged student react to the words and ideas depicted?
- Interview a student not in this class who you consider to be disadvantaged. What are his needs? What is being done to help him? What do you think should be done?
- Decide which of the classes you have taken was the least relevant to you. Why? How could it have been made more relevant? Did you do well in the class?
- Select a *simple* fact or idea that you might teach to a student who could not read well. How would you help him learn about this subject?
- Select a topic relating to an important person or event from the history of a minority culture. Evaluate information you can find about the topic in your school resource center or library. List other supplementary materials you might develop on the topic.
- Learn how to help keep health records and accounts for free meals given to disadvantaged students.
- Debate the following statement: *Lack of direction breeds self-reliance.*

TEACHER MANAGEMENT ACTIVITIES

- Have students write their definitions of the *disadvantaged student.*
- Discuss with the class problems of children from homes where English is the second language.
- Discuss with the class examples of IQ test questions which illustrate why intelligent children who are not from a middle-class American background may score poorly on some items.
- Encourage students to compare the amount of help and direction their parents give them in preparing for school and in other activities.
- Have class members debate the statement: *Lack of direction breeds self-reliance.*
- Have students participate in role-playing situations, such as a teacher aide attempting to break down a communications barrier between student and his math instructor.

- Provide opportunities for individual study projects to develop supplementary material to teach about the history or literature of minority cultures in America.
- Have students report to the class on programs for the disadvantaged. Discuss ways in which these programs have (or have not) helped improve the quality of education for the disadvantaged.
- Invite the school nurse and dietician to tell the class about health and food programs for disadvantaged students. Show the class how aides may help with administering these programs.

RESOURCES

The Disadvantaged Learner, S. W. Webster, ed., Chandler Publishing Company, 1966.

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Preparing to Teach the Disadvantaged: Approaches to Teacher Education, Bruce W. Tuckman, and John L. O'Brian, Free Press, 1969.

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Teaching Deprived Kindergarten Children (Filmstrip, purchase), Teacher College Press, 1969.

36 Children, Herbert Kohl, New American Library, 1967.

Up the Down Staircase, Bel Kaufman, Prentice-Hall, 1965.

TEXTFILMS AVAILABLE FROM McGRAW HILL

Operation Head Start (16mm, black and white) Bailey.

Portrait of a Disadvantaged Child (16mm, black and white)

Portrait of the Inner City School (15mm, black and white)

Unit 4

INSTRUCTIONAL METHODS

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Unit 4

INSTRUCTIONAL METHODS

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the criteria for selecting methods and materials of instruction.
2. Ability to formulate a reason for using different types of training aids and devices.
3. Ability to define the functions of an instructor lesson plan.
4. Ability to understand how to develop a simple instructor lesson plan.
5. Ability to demonstrate a knowledge of how to write a lesson plan through practical exercises.
6. Ability to use instructional methods in preparing an instructor lesson plan.

CONTENT

INTRODUCTION

This unit will deal primarily with the materials, methods, and equipment for instruction. A generalized discussion of instructor lesson plan preparation is included within the general framework of instructional methods. Individuals planning on working in schools or agencies responsible for preschool, elementary, or secondary education, should find this information useful.

The first part of this unit will deal with instructional materials that can be used in education today, and criteria for their selection.

SELECTION CRITERIA FOR INSTRUCTIONAL MATERIALS.

A wide variety of instructional materials are used in modern public-service education. Some of the materials represent broad approaches to meet the usual training needs; others are more narrow in scope, and have been developed to meet special training requirements, or to improve subject matter presentation. Within the broad framework of the public-school system, materials of instruction should be used to increase learning and to facilitate student skill development.

Whether considering instructional methods or materials, the questions of *cost* and *profitability* are of primary concern.

Cost. Materials, such as lesson handout sheets, may appear to be inexpensive, since a single person can prepare them in a minimum of time with little equipment and then present the handout sheet to large trainee audiences. Computers on the other hand, may be too expensive to use at the present time.

Profitability. However, when considering profitability, it becomes clear that what is learned by each student, and whether or not that learning can be transferred to future career experience, must also be added to the formulation. If the handout results in no behavior changes or in undesired changes, it must be regarded as an unprofitable training material. And if, on the other hand, the computer enables many students to learn efficiencity, it *may* be profitable to use it.

It is the infrequent event when cost and profitability factors are considered in the evaluation or selection of instructional methods and materials. However, educational accountability is becoming increasingly important in American education today. Indeed, it is critical that teacher's aides or administrative aides do not overemphasize cost, which is a relatively easy measurement criteria, as opposed to the complete consideration of accountability. The latter includes consideration of both cost and precise answers to questions aimed at determining the contribution of the methods and materials under consideration. *Accountability measures the accomplishment of educational objectives.*

Evaluating Profitability. The profitability and accountability of instructional methods and materials may be evaluated by such criteria questions as:

- Does it fit the *readiness level* of the students who will use it? This is particularly important in preschool programs.

- Does it help develop conceptual and/or actual skills?
- What are the objectives of the methods and materials?
- Is the material accurate and up-to-date? The real world is changing very rapidly. The classroom must reflect this rapid growth.
- Does the content of the material coincide closely with the type of education for which it will be used?
- Does it help the student to understand why certain things are better than others?
- Are the students allowed to explore their attitudes and feelings?
- Does it emphasize creative use of knowledge and problem solving rather than learning by rote?
- Does it help the student to recognize intended outcomes of his study?
- Does it contain or suggest ways by which the student can measure personal success in attaining certain goals?
- If it is an instructional material in text form, is it readable, comprehensive, and pleasing to the eye?
- Does it make integrated use of appropriate materials and subject matter, or is it just showy?
- Is it within the cost considerations for one's local budget?
- Will the material form the basis for career-related activities?

Need of Objectivity. Teachers and teacher's aides should also be aware of the need to establish a rationale for selecting the appropriate methods and materials of instruction required. Most instructional methods and materials, whether books, films, tapes, role plays, videotapes, or others, have vigorous defenders who become so emotionally involved that they see the method as a cure-all for an entire program. This is unfortunate, since each has its advantages, disadvantages, and limitations for particular educational purposes. The teacher's aide must learn to be objective in choosing materials.

TRAINING AIDS AND DEVICES

Any subject matter is taught more effectively through the appropriate use of instructional materials, There can be a great waste of time, effort, and money as a result of the improper use of materials of instruction. Teacher aides should not accept, without careful evaluation, such statements as: *85 percent of learning takes place through the eyes*. Obviously,

the amount a student learns through his eyes depends on what is being learned and the conditions under which the learning takes place. *There are times when one picture is worth a thousand words, but this is not always the case!*

A competent instructor uses all of the instructional materials and devices available in an expert fashion when they are needed. The use of training aids or written materials of instruction should be used only when they help to teach the right things effectively.

Types of Training Aids. There are various types of training aids. For example, for preschool programs, training aids are usually in the form of a game, piece of equipment, graphic representation, or illustration that helps the child to learn. Experience in public school programs, however, suggests that training aids are classified into these five types:

- *Visual training aids* - Chalk boards, posters, bulletin boards, displays, models, silent films, slides and other projected transparencies, and flannel boards.
- *Auditory training aids* - Radios, all types of recordings, and tape recorders.
- *Audiovisual training aids* - Aids which make use of both sight and hearing, such as sound motion pictures, videotape, sound filmstrip, and closed circuit televisions.
- *Synthetic training devices* - Devices or models built to simulate the action or function of a real device. These are frequently operated by the student and the prime purpose is to *develop feel* or learn *operational habits*.
- *Real life training aids* - Often the best available for use in actual instruction. Students are able to observe and learn more by exposure to *the real thing* than through use of other types of aids.

Characteristics of Training Aids. The greatest value of training aids lies in their appeal to the learner's senses, their ability to attract and hold attention, and their ability to focus student attention on essential elements to be learned at a given time. For instruction in elementary-school-level subject matter, a *mock up* of a device or process, or use of the actual item, is often vastly superior to a simple description. Training aids and instructional devices are usually designed, selected, or constructed by the individual in charge of the learning situation. Teacher's aides often help in this process. *The value of the instructional aid is in direct proportion to its simplicity, unity, colorfulness, flexibility, timeliness, and visibility.*

Training aids have not been effectively used in a wide range of public educational programs. One of the primary reasons for this is that large amounts of instruction employ the large group method, and there tends to be relatively little individualized instruction. As a result, instructional media, such as television, programmed instructional tests or machines, elaborate laboratories of learning, and 16mm motion-picture projections, have not yet been fully utilized.

Properly selected and relevant materials of instruction referred to as *software* are effective in terms of *profitability* and the *philosophy* of public education. In essence, software materials are instructional handouts keyed to the lessons and the skills to be learned. There are several variations and names for such materials, but they are usually classified as either *work sheets* or *information sheets*.

The work sheets help the student to perform a specific task or learn a specific skill. They are sometimes a part of a demonstration, or can be given the student after the lesson to assist in developing the skill demonstrated. Usually, work sheets tell the student how to do a task.

An information sheet gives the student the specific information, the theory, or the background data necessary to perform the work.

TRAINING EQUIPMENT

Specialty preschool equipment. The assumption in this unit, prior to this point, has been that learning based on the use of the method and material selected is transferable directly to career performance. However, most preschool educators recognize that opportunity for children to practice motor skills is also essential to the acquisition of skills. Readings, demonstrations, etc., may precede actual practice, but the opportunity for manipulating a tool, irrigating a garden, or practicing the material learned, is also required and essential.

It is often inefficient, costly, and impractical to train a child with real tools and equipment. However, a certain portion of the training has to be realistic enough to ensure later child transfer of learning, and to also achieve maximum learning in a minimum time period. To a large extent in preschool programs, the types of games, equipment, and tools selected materially affect the amount and rate of child transfer learning in a given time period.

The selection of preschool equipment must meet two main criteria:

- It must be functional and durable enough to actually work;

- it must assist in the learning experience for the child.

For example, toy blocks must be capable of performing a job and still be used as instructional aids.

Preschool training programs differ in scope and content. Consequently, it is impossible to develop a *cookbook* approach to instructional material selection. Experience in the use of preschool equipment for the training of early childhood teachers suggests several questions, such as the following, to give insight into equipment suitability:

- Is it too large and inconvenient to work with or operate?
- Can it be used in small group learning situations? If not, how many are required?
- Is it too delicate or transient to handle or keep?
- Is it too complex for the children to understand?
- Is it too covered or enclosed to permit learners' observation of working parts?
- Is it too difficult to procure locally?
- Is it too expensive relative to this program? If so, can it be rented?
- Is it too dangerous to use around young children?
- Will the maintenance detract or add to the learning situation?
- What other tools or equipment can be used in its place to teach the same skill and/or concept?
- Does the manufacturer have instructional materials already developed?

Student construction of educational materials and devices. The *project method* has long served teachers at all levels as a means for involving students in the subject matter and developing dexterities. The project method is characterized by an individual student or small group of students constructing an educational device or aid. The advantages to this method are:

- It provides the students with intimate knowledge of the working parts and principles of the aid or device under construction.
- It helps the students develop a measure of tool skill and accompanying motor skills.
- Program costs can be offset in terms of rental or purchase of equipment. (However, greater costs may be incurred by the project materials purchased and instructional time devoted to construction.)

- Having constructed an instructional aid or device, the students are better able to modify or adapt its principles to later educational or career experiences.
- Since many students have never experienced a tool-using situation, the project method (when correctly used) is a student ego builder.

The selection of the item to be constructed is critical to the success of the project method. Construction projects used in educational programs should be carefully designed so that the right skills are emphasized to the right extent. A common failure in project selection is to disregard the analysis of the skills and knowledges the students need to learn. Preschoolers, for example, obviously have different needs than do high school students.

The project selected for construction should allow students to develop skills that they do not originally possess. These skills should be those which are necessary to their success in the program.

The finished projects should be useful and used by the students in the educational program. The project development should result in an instructional aid of which the students are proud. In addition, the finished project should be consistent with the known needs and level of educational achievement found in the students involved in the project.

INSTRUCTOR LESSON PLANS - CONCEPTS

Major Part. The planning of a lesson for instructional purposes is similar to any other type of planning. As in preparing to build something, setting the stage for dramatic presentations, surgery, or in any other human endeavor, the success of the plan depends, largely, upon the *forethought* given to the problems to be solved. *It is an underlying principle of sound organization that, to achieve the maximum results, a sound plan of action must be set down.*

There are certain other principles which, if they are expressed in simplified or systematic arrangements of the facts, procedures, or materials required by the project, will produce smooth, appropriate, and meaningful results. It is with the application of these principles of organization to subject matter that this section will concern itself.

This discussion will:

- Establish the appropriateness of using good lesson plans for instructing.

- Identify the plan and its principles with an established format, or arrangement of points.
- Permit an opportunity to practice applying the principles of organization of lessons, or other principles, to this format.

Definition - Instructor Lesson Plan (ILP). *An instructor lesson plan is a guide to the presentation of a lesson. It is an outline of the scope of the material, and of the procedures the instructor intends to follow in presenting a lesson.*

Care must be taken to include all important facts, so that the element of memory (a fickle thing in time of stress) is reduced to the minimum. No point which is sufficiently important to require detailed explanation during the lesson development, should be omitted from the outline. Elaborate explanations can be filled in by the instructor, but should not be incorporated into the ILP.

Functions - Instructor Lesson Plan. The ILP plays a very important role in the instructor's daily assignments. These five major assists (below) to instruction are functions of the ILP; each gives a vital support to the instructor and his aide before and during the presentation:

- Guide to preparation of lesson
- Guide to physical arrangements and facilities
- Confidence builder
- Assurance of uniformity
- An aid to the substitute instructor

Preparation of Lessons. The major role of the ILP is assumed before the lesson is developed in class. An infinite number of factors can improve or weaken the lesson, and many of these must be considered during the preparatory phase, including:

- Subject coverage
- Method of teaching to be adopted
- Location of the classroom
- Training aids
- Special physical conditions which require attention

There is no better place to list these, or mention them, than in the ILP. If they are overlooked until class time, they can defeat the mission of the instruction.

Physical Facilities. Another application of the ILP is the

arrangement of the actual physical facilities needed for sound lesson development. Details such as these could be easily overlooked if not included in the Plan:

- Time and location of the class
- Nature of the accommodations
- Personnel to assist the instructor
- Comfort of the students
- Seating
- Ventilation

The importance of checking the physical facilities is revealed in the following example:

"An instructor had planned to use a slide projector. He had informed his assistant of the need for the equipment and slides to go with it. At the time the slides were to be shown, it was discovered that the projector was on hand but the slides were not. The class was too far removed from the source of the slides to get them, so the lesson had to proceed without the training aids." Had the instructor inserted into his own notes, *check projector and slides before class*, he would not have been faced with the embarrassment and confusion resulting from the error.

It is the responsibility of the instructor or his aide to see that all details of the physical environment affecting the lesson period and materials are provided for and, when necessary, included in the ILP.

Confidence Builder. The first few times a lesson is taught, the instructor will probably rely extensively on his lesson plan, in order to insure adequate coverage of the material. With repetition, he will gain confidence in himself by leaps and bounds.

There will be times when the class discussion will veer away from the immediate goal of the lesson. The presence of the lesson plan on the rostrum adds a definite sense of security in such instances. The lesson plan permits the instructor to handle efficiently the questions that arise, and to get back on the track without developing a sense of confused presentation; of having his mind blank-out momentarily; or groping for that which comes next.

Uniformity. Whenever a lesson is taught, the objectives and subject matter coverage should be uniform. This requirement does not, in any sense of the word, restrict the technique of teaching employed by an individual instructor. If the instructor fails to cover the material set forth in the lesson plan, it will be lost as far as the class is concerned.

Substitute Instructor. The substitute instructor is perhaps more aware of the full value of the ILP than the regular teacher. If no written plans have been formulated, a difficult situation faces the substitute, particularly if he had not taught any of the previous lessons in the subject. He is forced to burn the midnight oil in order to discover the relationship and purpose of his lesson to the course as a whole, and to either report to class without sufficient rest, or to try bluffing his way through. The latter course is worse than no teaching at all.

The possibility of leaving wide gaps in the student's learning, and the resultant dissatisfaction aroused with the subject as a whole, leave much to be desired. An ILP prepared by one instructor generally should not be used by another in its existing form. However, it does save considerable preparation time for the substitute instructor.

INSTRUCTOR LESSON PLANS - PREPARATION

The final lesson plan should not be prepared until after all details of subject matter, aids, and other supplements to the lesson are determined. The final basic outline is evolved by careful *dry-running* and revising to achieve the working plan or guide. When a lesson is planned, a systematic arrangement or format should be maintained, to assure that the important elements are arranged in logical order.

Since the function of a lesson plan is to serve as a guide during the presentation, the form in which it is prepared will be affected somewhat by the method of presentation. Obviously, a plan for a practical exercise, or for leading a discussion, will differ in form from the plan prepared for a lecture. However, the basic format from which the other plan may be developed later is the *lecture outline*. The latter type is the one under discussion at present and will serve as a guide for each of the following points.

Every good ILP contains four main points in its physical makeup:

- *Heading* (which includes certain administrative information)
- *Introduction* (which projects the main features of the lesson and the pace)
- *Development* (where the main and sub-topics are listed)
- *Summary* (an opportunity for reemphasis)

Heading - (Administrative arrangements). Instruction generally must be given in common-use classrooms. Training aids, demonstration tools, and projection equipment must be shared

with others; and must frequently be obtained from a centralized source not under the immediate control of the instructor or his aide. Last-minute planning for the use of such facilities is inviting disaster.

The first portion of the lesson plan, therefore, should list all the administrative arrangements necessary for the conduct of the lesson, including the aids and equipment that need to be assembled in advance of the class meeting. It should include:

- Name of the subject.
- Title of the particular lesson.
- Time allowed for presentation.
- Method of presentation for which the lesson is designed.
- Objective of the instruction.
- Lesson file number.
- Date.
- Training aids needed.

The time allowed for length of the lesson is usually predetermined for the instructor. It is a factor over which he has little control, but which will influence the selection of the method of presentation. There are definite objectives that must be accomplished in the time available. These must be clearly stated in the heading. At the conclusion of the presentation, each student should be very aware of what has been set up as the minimum standard of achievement.

Introduction - (Setting the stage). The introduction must serve the four purposes listed and discussed below:

- *Tie-in with previous knowledge*. It must relate the present lesson material to a previous lesson, or to earlier related experiences. If a tie-in with previous knowledge is not clearly made, each lesson will remain as a separate entity, and will lose its relationship as a part of the whole. *A continuous train of thought must be maintained.* The sample introduction below shows a tie-in to a previous lesson:

  INTRODUCTION

  In one of our previous classes we covered the planned approach to study problems. We discussed scanning, reading, and studying. But remember we assumed that we were expert readers. This is not true. Few people are expert readers. So what good has been all of our training?

If you cannot read effectively, how can you expect to study effectively? Today we will learn how to get out of this dilemma. We will become introduced to the Reading Improvement Course and will learn just how to improve our reading. The better we can read, the better we will be able to study all of our subjects in career education in the short time allowed for study.

- *State the objectives*. The lesson objective must be clearly stated. This will motivate the interest of the class, and will also establish a goal in the minds of the students. This is particularly important when stating it for the conference method of instructing. It should be stated in behavioral terms, that is, *the students should have a clear idea of the kind of behavior they are expected to acquire as a result of the instruction.*

- *Motivate interest*. Developing interest at the start of the lesson makes it much easier to hold the class's attention. Each student entering the classroom at the beginning of the period is mentally concerned with his own problems or interests. To shift him away from that pattern into a pattern of attention to the instruction requires strenuous effort by the instructor. Unless the entire group's attention can be focused early on the instructor and his presentation, it will be increasingly more difficult to achieve it later in the lesson.

- *State the purpose*. Motivating initial interest may not be enough. Every class has at least one student whose interest in the subject is a negative one. Many times, one such student can make his indifference so apparent that it produces a parallel indifference in the entire group. To avoid this, *the introduction will include a definitely stated reason for the subject or problem in terms of the individual class member.* It must state why it is important for him to learn all he can about the lesson materials. It must convince him that he needs to know this in order to be able to do his part of the job effectively - the *why* of the job.

Whether the Introduction be in written, or in outline form, is a matter of preference. However, the narrative or written form permits the instructor greater ease in *getting over* the initial few minutes of the lesson, which is usually a difficult stage of the presentation.

Development - (Developing the Action). Once the preliminaries are over, the developing of the lesson material begins. It is in this part of the ILP that the actual instruction takes place, the main points are carefully explained, and the mis-

sion of the lesson achieved.

- *Built-in logic*. There is one quality that must be built into the development phase of the lesson plan - *logic*.

  To make each ILP fit squarely into the over-all subject, each plan is tied in to previous instruction.

  Topics and sub-topics that concern one major area are related to each other and should be grouped that way. No topic should be included as an afterthought and placed into the sequence at random. The order of the main points should appear as a simple, easy, natural, step-by-step progression.

  This principle of sequence is referred to as *teaching from the simple to the complex; from the old to the new*. It is the same sort of arrangement used in discussing this lesson on instructional methods.

- *Flow of thought*. To bring each item into a relationship that teaches smoothly, *bridging* is necessary. Transitional statements, which might relate previous subject matter to the following topics must be created to show a close relationship. Too many subjects are taught as clearly unrelated *lists*. It is the responsibility of the instructor to invent an apparent relationship, rather than to permit it to remain a naked series of facts. Such invention need not discolor, mislead, nor misrepresent the facts; it merely produces a pattern which makes for easier instruction and more rational learning.

- *Unrelated facts*. Sometimes it is not obvious exactly where certain points belong in the plan. Instead, they may comprise a series of major elements, each one of equal importance. If no apparent relationship can be seen it is obvious that any order, so long as it is not distracting nor clearly illogical, can be chosen. The instructor must be certain, however, that no relationships can be established, before this *listing* method is used.

- *Student understanding*. It is wise to consider the student level of understanding when devising the ILP. The instructor can more easily guide his approach to the students' minds if he knows how much or how little the class knows about the subject. He must gear his teaching to that level. This involves appropriate vocabulary, *absence of jargon*, and clear explanation of technical terms.

INSTRUCTOR LESSON PLANS - PRESENTATION

Presentation Helps. In planning the development of a lesson

plan, there are two presentation helps which must be considered:

- *Provision for training aids.* Most lessons will include training aids which are invaluable for stimulating and sustaining student interest. Whatever they may be, it is essential that they be included in the ILP. Provision is made for this by requiring that each training aid be *clued* into the lesson plan, at the appropriate time it is to be used. To do this, the ILP provides a marginal space for all kinds of *helps*. Here the instructor finds reminders for using the aid indicated, showing him when to use it, and how it is to be presented. Sketches, designs, formulae, or other factual materials can either be suggested or drawn in full detail, depending upon the skill of the instructor and the need at the time of use. These clues are extremely important.

- *Timing the lesson.* The second item for polishing up the presentation involves timing. It is shown in the left marginal column. Timing is very important and can be checked during *dry-running*.

In each of these presentations, help is needed to furnish the final polishing of the presentation effort. They must be just as well planned as the rest of the development. They must fit into a pattern of sound instruction.

Checking Student Understanding. The instructor has provided for the training aids; he has practiced his lessons, so his timing and sequence are correct; now he assumes that everything is complete, and all that he needs to do is to present the lesson. *This is an error!* If he assumes that all that is required is an ILP, set up according to the pattern just described, he is overlooking one major need: *he must check the understanding of his students.*

So far, no provision has been made to see whether the students might have any questions, or whether their understanding is complete. The ILP, up to this time, has not given them a chance. An opportunity for questions, to clear up any misunderstanding, or to permit additional comments, is a need which can be provided for in the ILP. Such an opportunity may occur at any time during the lesson development.

To make sure that at least one such chance is given, the terms *questions, answers,* and *comments* are written into the ILP at the end of the Development stage of the outline. At this time, students who have questions or comments are urged to develop them. This whole process is designed to give the instructor and his aides valuable *feedback* or information about how well the lesson is going.

Waiting until the end of the lesson may be a deterrent to actual questions. Most questions occur during the development of a lesson rather than at the end. So, to make it more flexible and timely, it is suggested that the instructor incorporate into the ILP a hint or clue to *check understanding*. This may be done at various intervals throughout the lesson. The frequency of its use can be determined by experience, when the instructor will discover which areas of the lesson are most likely to produce difficulty in learning. This feedback process should be inserted at the close of each difficult area of subject matter. The use of this check will firm up the learning which is intended to take place. It is particularly important to use it when the method of instruction is by lecture.

Maintaining Student Interest. Student interest at best is a difficult item to measure. Some external manifestations which can be observed include: restlessness among the students, gazing off into space, reading while the instructor is talking, and dozing.

The good instructor prides himself that none of these instances occur in his class, yet he can never be quite sure of what is taking place in the students' minds, even when they seem to be listening intently. Consequently, some provision must be made to insure that student interest is maintained at a high level throughout the presentation.

Where a demonstration is not included as an essential part of the lesson plan, some other device should be employed. An occasional question directed to one of the students, whose interest appears to be lagging, will serve to bring his attention to a proper focus.

If, however, the interest of the entire group lags, the instructor should look to his manner of presentation. It may be that the instructor has failed to integrate the lesson with the major course objectives. It may be that the lesson is unrealistic. The instructor may have overlooked the level of student understanding and is teaching above or below their ability to grasp the instruction.

The instructor must be alert to the psychological effects of the numerous distractions, which are always present or easily potential, so that when he prepares his lesson he makes at least some mental reservation to that effect. The maximum attention span of the normal individual can persist without interruption for not more than three minutes, without loss of concentration. However, even this span is not the usual experience; too many distractions are always breaking into this period of concentration. In view of this, the instructor must be ready to provide some counter-distraction to restore attention.

SUMMARIZING THE LESSON

In the sequence of developing the lesson plan, the finish is of importance second only to the introduction. The instructor should use the summary as a teaching tool. It has a two-fold purpose: to *review* the important points, and to *tie-in the lesson with the one to come*. Emphasis must be placed on each major point reviewed. This will fix the lesson material firmly in the students' minds. Tying the lesson in with the one to follow will produce a continuous train of thought. This can be done as the final statement of the summary, which should be prepared in this order:

- Objectives
- Mechanical aids
- Results
- Introduce next lesson on, for example, Principles of Instructional Aids

The summary can be developed either by the lecture method, or, if time permits, by the use of questions designed to measure how much the students have learned during the lesson. The question method may reveal an occasional lack of understanding or, even more probably, a shortcoming in the instruction. Thus it can guide the instructor for improving later lessons on the same subject. *Warning: Do not include new or untaught materials, whether omitted from the lesson or not intended for inclusion, in the summary!*

PRACTICAL EXERCISE

Need for Experience in Organizing. A major problem frequently met among new instructors is how to organize material which has been obtained during the research phase of preparation into an effective lesson plan. Most students seem to need a better understanding of the process of organizing subject matter. Therefore, supervised experience in arrangement of subject matter should be a part of the study of lesson planning.

By classifying the material into properly selected topical groupings, the student can be given insight into the application of format and logic. The practice of grouping facts or ideas, so that topical headings become apparent, and the rearranging of these topics into a sequence which seems natural and logical for teaching, is needed by those who have had no training or experience in the organization of lesson materials.

Development of the Practical Exercise. During this phase of the training, great care must be taken to make sure that students understand what they are to do. To achieve this, a set of directions, involving administrative details, must be pro-

vided, and be carefully explained.

Good organizing gives insight into the process of thinking and must take place during the planning of subject matter. After this is done, instructional methods will be more effective in the educational process.

CHECK LIST FOR THE INSTRUCTOR LESSON PLAN

- *Does the HEADING include* -
  Subject, title, time (length of lesson), method of instructing?
  Place, training aids, number in audience?
  Instructor's name, file number, date, number of assistants?
  Objective?

- *Does the INTRODUCTION* -
  Tie this lesson in with previous lessons?
  Provide for review where desirable?
  Show value of learning this material?
  Serve as an interest-arousing factor?
  Establish objective of your lesson?

- *Does the DEVELOPMENT provide* -
  An outline of new material arranged in suitable form?
  Development from known to unknown; from simple to complex?
  For state of training of students?
  Complete outlines for demonstrations and ground performances, if any?
  Periods for checking student understanding?
  Examples, illustrations, and devices for clarifying material?
  Integration, where possible, with other training?
  Directions for use of aids?
  Sketches for blackboard work, if board is to be used?
  Key questions, desired answers, and other comments?

- *Does the SUMMARY* -
  Review important points and state conclusions reached?
  Tie-in with lessons to follow?

- *Is the PLAN* -
  Screened so that all material points toward objective?
  Provided with smooth and purposeful transitions?
  In a form that makes it usable during class period?
  Practical with regard to time-material relationships?

REVISION OF THE INSTRUCTOR LESSON PLAN

No single instructor's lesson plan will be perfect enough to meet all future situations, regardless of the amount of time

spent on the original planning. Conditions vary too much from day to day and from class to class. Likewise, unforeseen weaknesses in the instruction may not become apparent until the students reach the application phase of their training.

The time to revise the plan is when the instructor first becomes aware of deficiencies and omissions. Immediately after a lesson is taught, the plan should be examined with a view toward revision. Notes should be made concerning mistakes, awkward spots, and omissions. Even after a lesson has been taught a number of times, it will be found possible to develop new devices and new training aids that will further intensify student learning. A suggested procedure for revision is to evaluate the plan in terms of the check sheet on the previous page, in addition to such evaluation prior to presentation.

STUDENT LEARNING ACTIVITIES

- List the criteria you would use to select methods and materials for instruction.
- Discuss in small groups the reasons for using instructional aids in the teaching process. What kinds of aids would you use for specific purposes and why?
- View and discuss movies or filmstrips on teaching methods and materials; for example, *Lectures Are a Drag, Learning and Behavior (The Teaching Machine)*, and *Introduction to Student Teaching*.
- Write an essay defining the functions of an instructor lesson plan.
- Prepare an outline showing the steps you would use to prepare an instructor lesson plan.
- Read a short chapter in one of your textbooks, and then organize and outline the material so that a logical, progressive outline will be developed.
- Choose a short subject to teach (10 to 15 minutes), and prepare an actual instructor's lesson plan to help you present your lesson. This should include the appropriate instructional materials to help accomplish the lesson objective.
- In small groups, practice presenting the lesson prepared in the exercise above to others. Discuss ways to improve your instructional methods.

TEACHER MANAGEMENT ACTIVITIES

- Have the students list the criteria they would use to select methods and materials for instruction.

- Have the class discuss in small groups the reasons for using instructional aids for specific learning purposes.

- Show and discuss films or filmstrips on instructional methods; for example, *Lectures Are a Drag*, *Learning and Behavior (The Teaching Machine)*, and *Introduction to Student Teaching*.

- Assign an essay defining the functions of an instructor lesson plan.

- Give your students a jumbled passage purposely disorganized, have them read the exercise, and then place the main ideas and supporting ideas in an organized outline.

- Have students prepare instructor lesson plans on topics of their choosing.

- Have the class, in small groups, practice student-by-student, presenting lesson plans to the others. Encourage discussion on ways to improve instructional methods afterwards.

RESOURCES

Individualized Instruction: Its Materials and Their Use, Oregon State Higher Education, 1970.

Selection of Instructional Materials for Children and Young People, American Library Association, 1969.

How to Plan for Student Teaching, National Education Association, 1966.

Instructional Design, A Plan for Unit and Course Development, Jerrold E. Kemp, Fearon Publishers, 1971.

Learning and Behavior (The Teaching Machine) (Movie, 16mm reel, rental), Carousel Films, 1969.

How to Utilize Community Resources, National Education Association, 1967.

Lectures Are a Drag (Movie, 16mm, reel, purchase), Churchill Films, 1970.

Introduction to Student Teaching (Movie, 16mm, reel, rental), Indiana University A-V Center, 1970.

The Library: A Knowledge Retrieval Center (Filmstrip, purchase), Encyclopedia Britannica, Inc., 1969.

The Teacher As a Speaker (Sound filmstrip, purchase), Addison-Wesley, 1969.

Unit 5

BASIC SKILLS IN THE LANGUAGE ARTS

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Unit 5

BASIC SKILLS IN THE LANGUAGE ARTS

INSTRUCTIONAL OBJECTIVES

1. Ability to understand how reading, writing, listening, and speaking form the basis for developing skills in the language arts.

2. Ability to describe techniques used in the classroom to determine students' reading abilities and to identify their reading disabilities.

3. Ability to demonstrate a knowledge of techniques used in the classroom to determine the readers' perceptive skills.

4. Ability to recognize how writing skills can be taught through the use of familiar comic strips.

5. Ability to become familiar with the techniques used in the classroom to teach appropriate grade level vocabulary.

CONTENT

INTRODUCTION

This unit will assist in the understanding of methods by which students develop skills and abilities in the language arts - reading, writing, listening, and speaking. The teaching techniques described here are modeled after the way learning is observed to take place in most instances - in small and gradual steps or increments. This unit will illustrate this technique in teaching the developmental skills in language arts; not for the purpose of teaching people how to be teachers of language arts, but rather to become aware of how children learn.

THE LEARNING PROCESS

In the Home Environment. Before a child enters school, he learns and acquires skills at a rapid rate. This learning is

relatively painless and easy for him. Why is it, then, that this same child - who seems so bright and has already learned so much - may not be able to learn in school? Educators have found this learning disability a very difficult problem to solve. One of the many solutions proposed is to teach him in small, easily manageable amounts.

Watch a very young child looking at a television program. This is not a *difficult* activity for him. Although he may not even understand the plot of the show, he responds naturally to what he is experiencing. He may merely laugh at a picture on the screen. Yet this is the beginning of a learning experience. At present he sees only the funny picture and automatically responds with a laugh. As he grows older, he will recognize characters on the screen and learn their names; when he is still older, he will understand what the plot is, and will be able to follow the sequence of events, and probably predict the outcome of the program he is watching. Notice from this example that:

- The child is enjoying himself while learning.
- He is learning by responding naturally.
- He is responding naturally only to familiar things he understands.
- As his understanding increases, he comprehends more of what he sees, and is eventually able to respond to and comment on stories on the screen.
- Unless the child is handicapped in some way, he will almost certainly learn, because he is absorbing and reacting to what he sees and hears (stimuli) at his own pace and in a friendly and familiar environment.

We observe that the child is really noticing only those elements in the television program that he finds familiar and that bring out a natural response. As he tests his response and finds it to be the right one (for instance, if the adults in the room laugh at the same time as he does), he begins to notice and respond to more on the screen. This is a very gradual process; the child is happy with his response, and, although he does not understand everything, he finds that his responses are proper reactions to what he does understand. At each step toward complete understanding, he takes a small chance by choosing to respond to something on the screen that he has not noticed before. Yet each step is so small that the chance he takes is a source of pleasure to him, because he is almost sure that he will respond properly. The threat of being wrong really does not occur to him, because he is secure in the correctness of his response up to that point.

In the School Environment. When this same child enters school, he finds himself in a new and foreign environment. Instead of being surrounded with familiar people and objects, he is confronted by strangers. He knows that he must learn, yet he quickly discovers that learning in school very often means just coming up with the right answers, and he may develop a real fear of giving wrong ones. A child who feels afraid or threatened can never enjoy school, and unless he enjoys it he can never really learn. This fear often shows up first in an inability to learn to read, and the child who does not read is doomed to partial or complete failure throughout his school years.

Why not make learning to read as enjoyable and natural for this child as learning to understand a television show? That is what teaching the language arts in small steps is all about.

Introduction to Learning. The process of learning in the home can be duplicated in the classroom by using the same technique to design a program for teaching reading. From the reading skills to be mastered, the teacher selects a series of steps (increments) through which each student will progress at his own pace. The first of these steps will call for an almost automatic response from the student; for example, he will be shown a flash card of a familiar object, such as a cat, and he will say the word that the picture represents, knowing that he is right. He will then be shown the word *cat* on the other side of the card, and, because he has been told that the picture and the word he has said are the same, he will feel secure in responding to the written word *cat* on the card by saying the word again.

At this point, he is not yet reading, but he is responding naturally to the idea that letters on a card can have the same meaning as a familiar picture he has identified. He thinks that he is reading the work, just as a young child thinks he is watching television, and, although it may be some time before he will be able to identify the word without first looking at the picture, he has taken a small but significant step in understanding what it means to read.

After he has become familiar with the first step and can do it quickly and easily, the teacher will reverse the procedure, showing him the word first, asking him to say it, then showing him the picture so that he can check his answer. The teacher will use the same set of cards, and the student's familiarity with the way the words look and their associations with the pictures will remove much of the fear he might have about being wrong. The teacher will constantly encourage him by showing the cards he gets right again and again, so he will feel pleased and be willing to take a chance on the harder cards.

Most everyone learns by taking chances on being wrong some of the time. People probably learn more from their mistakes than from those things they always do correctly. But very few people will eagerly take a chance on being wrong in an environment where they feel that they haven't a fairly good chance of being right, or that being wrong is dangerous or bad.

Learning in Increments. Learning is an individual process. Each child learns at a pace that is best for him. For one child, the teacher may have to select a set of steps to present material that another child can learn in half the number of steps. The important thing to realize is that teaching a child in small increments teaches him skills, but also gives him confidence in his natural ability to learn. Once he realizes that learning in school can be as natural as learning to play games on the playground after school, his pace of learning will increase. He will be more willing to take a chance, to respond naturally, and without fear. Each step he takes in mastering skills or knowledge will be larger than the one before it.

Learning with Familiar Materials. A child entering school finds almost everything he sees unfamiliar, and his self-confidence is challenged. The teacher can help the child overcome his fears by making sure that the materials in the classroom are familiar to him; learning works best when the materials are familiar to the students. Realizing that learning is most likely to take place in a familiar environment, the teacher uses pictures, reading materials, and music that the student will recognize from his experience outside the classroom. The student will have more confidence in himself if he sees that there is a relationship between the world of school he sees in his learning materials and the world he faces when he leaves the classroom.

In studying this unit, the materials recommended for teaching are books, magazines, records, and comics that the students have previously seen and used - things of familiarity. The skills to be mastered are best presented in easy steps in a nonthreatening environment that permits the student to see clearly that what he learns can increase his enjoyment of things he is already interested in. *It is the teacher's responsibility to control the challenge that each step presents to the student.*

The teacher will begin to teach reading in a very limited *stimulus field* (the flash cards described above). He will then proceed, individually with each student, to an almost unlimited stimulus field, such as an encyclopedia, in which the student will see much that is unfamiliar to him. If the student can face this large stimulus field without fear of being wrong,

and can use his own acquired skills to respond naturally, then the teacher has been successful.

Some educational experts contend that the skills a student must gain to do well in the language arts are not in themselves difficult. It is the learning process - in fact, school itself - and not the subject matter that causes trouble for many students. Incremental learning tries to make this learning process an enjoyable, natural, and effective experience for each student. A major objective in studying this section will be to see how this can be done. Each language arts goal will be explored in a short incremental learning exercise with suggested Teacher's Goal, Teaching Procedures and Materials, Suggestions for Teaching, and Evaluation Check-Out.

LANGUAGE ARTS GOALS - READING

Determining Students' Reading Abilities

Teacher's Goal: To determine and develop students' abilities in:

- *Word Recognition Skills*

  To know the names of letters,

  To match letters, and

  To match capital and small letters.

- *Word Meaning Skills*

  To associate pictures with words, and

  To identify new words by picture clues.

- *Comprehensive Skills*

  To understand that printed symbols represent objects.

Teaching Procedures and Materials: Use this procedure for the introduction to teaching:

- Using colorful pre-primer flash cards, place them one at a time, picture-side up to allow the reader to see the picture clue. Have the student read aloud the word on each card.
- Turn the cards picture-side down. Have the student read them aloud, this time without benefit of the picture clue.
- Repeat, using primer flash cards.
- Spread the flash cards out on the table or desk, picture-side up, and allow the student to arrange them to form a complete thought.

° Repeat this procedure picture-side-down.

Suggestions for Teaching: Create a nondrill-oriented, flexible, nonthreatening atmosphere in the classroom by placing colorful advertisements and interesting articles about show business and sport personalities from magazines such as *Ebony, Time, Newsweek, Sports Illustrated, etc.*, around the room. These items can be taped or stapled to large sheets of white paper or thumbtacked to bulletin boards.

Make all explanations on a small chalkboard beside you and the student. It is essential that you maintain as close a personal relationship with him as possible. For this reason, explain all mechanics of reading on the chalkboard rather than with an impersonal machine with its drill-oriented filmstrips.

If the child does not know the sounds of the letters of the alphabet, using the teaching procedure given above with a box of phonic flash cards.

Rather than giving a standardized test for checking the student's reading progress, use the personalized method of having him read two or three paragraphs from a graded book.

If he begins reading easily, he should still continue through the entire pack of cards. His success in going rapidly through what he already knows as a kind of testing process is a new and exhilarating experience for him and greatly improves his self-image.

Flash cards do not contain verbs. The instructor can write a verb on the chalkboard and help the student understand how it connects the subject with the object of a sentence or complete thought.

Evaluation Check-Out: The student should respond quickly and correctly, pronouncing the sounds of the letters as they appear in the beginning, middle, and end of words. If the reader misses ten words at any given grade level, his reading grade is the next lowest.

If the reader can express thoughts by manipulating existing word cards, he can read the cards. If he does begin reading easily, he should still continue through the entire pack of cards.

Determining the Reader's Perceptive Skills

This teaching unit in language arts is concerned with determining a reader's perceptive skills. The main goal is to un-

derstand techniques used in the classroom to determine the reader's perceptive skills.

Teacher's Goal: To determine each student's ability in the following reading skills and help him develop them further:

- *Auditory Skills*

  To repeat words of two and three syllables that are pronounced to him,

  To know the number of sounds in words,

  To hear the differences in words,

  To hear the varying lengths of words,

  To hear sounds in the beginning, middle, and end of words, and

  To hear rhyming words.

- *Visual Skills*

  To use pictures as clues,

  To recognize colors, shapes, and sizes, and

  To observe likenesses and differences in words and letters.

- *Comprehension Skills*

  To use correct phrasing when reading aloud (not word-by-word),

  To use proper voice intonation to give meaning.

Teaching Procedures and Materials: Let the reader read aloud to you from the *Dr. Seuss* books in the following sequence:

Dr. Seuss' ABC

Hop on Pop

One Fish, Two Fish, Red Fish, Blue Fish

Green Eggs and Ham

The Cat in the Hat

The Cat in the Hat Comes Back

Horton Hatches the Egg

How the Grinch Stole Christmas

The Dr. Seuss books are particularly well suited to this stage in the development of reading skills. The large and colorful illustrations provide an easy transition from the flash card procedure, and the layout of the books is extremely appealing. Elementary vocabulary and sentence structure are presented in a rhyming format that is fun for the student to read aloud, and he can easily learn correct phrasing from the natural rhythm of the sentences themselves.

Suggestions for Teaching: A notebook or chart that you keep confidentially will help you remember the readers' progress and areas of particular difficulty. The personalized, one-to-one approach must be continued. Make a creative effort to engage the students' interest and participation.

Evaluation Check-Out: The reader will learn to do some things easier than he does others. As long as he is reading aloud intelligibly and enjoys the reading, he should be allowed to move on to the next stage of development, even if he has not yet mastered every single objective listed above.

Acquainting the Reader with a First-Grade Vocabulary

The primary objective of this unit of instruction is to understand the techniques used in the classroom to teach the reader in first-grade vocabulary.

Teacher's Goal: To improve the student's vocabulary by developing his abilities in word analysis by these techniques, for understanding and knowing the words in Table 1, and (hopefully) in Table 2:

- *Phonics:*

  To recognize single initial consonants and make their sounds: *b, c, d, f, g, h, j, k, l, m, n, p, q, r, s, t, v, w, x, y, z.*

  To know single consonant sounds at the end of a word (hat).

  To know single consonant sounds in the middle of a word (seven).

  To know names of vowels.

  To know sounds of initial consonant blends: *sh, st, bl, pl, tr, fr, wh, th, ch, fl, cl, gl, sp, sm, sn, sw, tw,* etc.

- *Structural Analysis:* Knows endings, such as *ed* as in *wanted, ed* as in *laughed, ed* as in *liked, ing,* and *s.*

  Recognizes compound words, such as *into* and *upon.*

Teaching Procedures and Materials: Allow the reader to read those comic books he desires which bear the insignia of approval of the *Comics Code Authority.* At this level, offer a selection from those published by the American firms of *Illustrated Humor, King Features,* or *Fawcett Publishing Company.*

For an interesting, precisely graded basic reading series, you may want to use either the Harr-Wagner *Deep-Sea Adventures* or the *Morgan Bay Mysteries*. For these specific objectives, the most appropriate would be *Sea Hunt*, grade level 1.8.

Suggestions for Teaching: As he advances from the Dr. Seuss books, the student begins to expand his reading skills to cope with the more standard story format. After he has met the objectives stated for this section, he will realize that he is capable of reading a "real" book or magazine, but he may at first feel unsure of his ability to do so. The absence of rhyme may make reading aloud harder for him than it was in the Dr. Seuss books; the plot and the characters are more complex. He will come across more words that he does not recognize. Offering a wide selection of high-interest reading materials, such as are suggested above, and encouraging him to choose whatever interests him, will help the student to get over this initial uncertainty.

If he seems reluctant to start reading what he has chosen, go over the format of the book with him first, discussing the illustrations and his interpretation of them. Ask questions about the illustrations that will spark his interest in the text. Discuss other aspects of the format, such as how long the story is and how many pages there are in the book. If the child fully familiarizes himself with the book's nonverbal aspects before he begins to read, his first real reading experience is more likely to be an enjoyable one.

While using the chalkboard to explain the mechanics of reading, you should keep a little notebook for personal notes about the reader as well as keeping track of the page number he is currently on.

Perhaps for the first time in his life, the reader has now become involved in a complete book with a plot and characters, some of whom he can identify with. He is now aware that he is capable of completing a book and that, above all, *reading has not been a painful experience for him.*

Evaluation Check-Out: The student should be able to identify the words listed in Table 1, in various settings.

He should also be encouraged to identify the additional words, which are found in six of seven leading primers, as listed in Table 2.

In addition to gaining vocabulary skills, the reader should be able to:

- Follow printed directions.

Table 1

Basic Word Vocabulary for First-Grade Readers

a	cap	get	jump	play	to
airplane	car	girl	kitten	pretty	toy
an	Christmas	give	like	puppy	tree
and	come	go	little	ran	two
apple	cookies	good	look	red	up
are	cowboy	good-bye	make	ride	want
at	daddy	green	may	run	we
away	did	his	me	said	what
baby	dinner	have	mitten	see	where
ball	dish	he	morning	she	will
be	do	help	mother	show	with
bad	dog	her	my	sleep	work
big	down	here	near	something	yellow
birthday	fast	hide	no	splash	you
blue	father	home	not	stop	your
boat	find	house	oh	surprise	
bow-wow	fine	I	on	table	
cake	fish	in	one	thank	
call	for	is	party	that	
can	funny	it	pie	the	

- Verify a statement
- Draw conclusions from given facts (what do you think happened then?).
- Recall what has been read aloud.
- Read silently and recall what he has read.
- Place events in sequence.
- Remember where in the book to find answers to questions he is asked.

Table 2

Additional Vocabulary Listing for First-Grade Readers

about	cat	how	new	soon	was
again	could	just	night	take	water
all	cow	know	now	them	way
am	farm	laugh	of	then	went
as	from	let	put	there	were
back	fun	long	rabbit	they	when
black	had	man	sat	this	white
boy	happy	many	saw	too	wish
but	him	Mr.	so	us	who
came	his	must	some	walk	yes

Acquainting the Reader with a Second-Grade Vocabulary

The general goal of this unit of instruction is to understand classroom techniques for acquainting students with a second grade vocabulary.

Teacher's Goal: To improve the student's vocabulary by developing his abilities in structural analysis in these word areas:

- Little words in big word (*many*).
- Compound words (*barnyard*).
- Possessive word endings: *'s, s'*.
- Other word endings: *d, ed, er, est, ing, ly, t, y*.
- Contractions: *can't, don't, he's, I'll, I'm, isn't, it's, I've, let's, we've, won't, you're*.

Teaching Procedures and Materials: Let the reader choose whichever of the *Classics Illustrated Junior Comics* he desires.

Offer a selection of other reading materials, such as:

- *Deep-Sea Adventures:*

  "Treasure Under the Sea" 2.1
  "Submarine Rescue" 2.4
  "Pearl Divers" 2.8

- *Morgan Bay Mysteries:*

  "Mystery of Morgan Castle" 2.3
  "Mystery of the Marble Angel" 2.6

- *Comics Code Authority Comic Books:*

  Dell Publishers

Suggestions for Teaching: Follow the suggestions outlined under the paragraphs concerning the first grade vocabulary. Continue with the individualized approach, encouraging the reader by asking him questions about his silent reading, and by listening to him read aloud.

Evaluation Check-Out: In addition to the vocabulary presented in Tables 1 and 2, the reader should be able to identify the words in Table 3 in various settings.

In addition to vocabulary skills, the reader should be able to:

- Find a main idea.
- Follow a plot sequence.
- Read clearly and distinctly.
- Read with expression.
- Read fluently.
- Understand simple punctuation.
- Read silently without lip movements or whispering.
- Read without head movements.

Table 3

Basic Vocabulary for the Second Grader, In Addition to the Vocabulary in Tables 1 and 2

after	clean	four	live	pull	think
always	cold	full	made	read	those
any	cut	gave	much	right	three
around	does	goes	myself	round	today
ask	done	going	never	say	together
ate	don't	got	off	seven	try
because	draw	grow	old	shall	under
been	drink	hold	once	sing	upon
before	eat	hot	only	sit	use
best	eight	hurt	open	six	very
better	every	if	or	small	warm
both	fall	into	our	tell	wash
bring	first	its	out	ten	well
brown	five	keep	own	that	which
buy	fly	kind	pick	their	why
by	found	light	please	these	would
carry					write

Acquainting the Reader with a Third-Grade Vocabulary

The main objective of this unit of instructions is to understand classroom techniques for acquainting students with a third grade vocabulary.

Teacher's Goal: To enable the reader to improve his vocabulary further by:

- Refining previously learned skills.
- Identifying root words.
- Learning prefixes and suffixes:

prefixes		suffixes	
a-	ex-	-dom	-ness
be-	in-	-ful	-th
dis-	un-	-less	-ty

- Understanding how to use an elementary school dictionary to find word meanings.
- Understanding and knowing synonyms, antonyms, and homonyms.

Teaching Procedures and Materials: Allow the reader to choose the reading material he desires from the following list:

- *Deep-Sea Adventures*

  "Frogmen in Action" 3.1.

- *Morgan Bay Mysteries*

  "Mystery of the Midnight Visitor" 3.2
  "Mystery of the Missing Marlin" 3.5
  "Mystery of the Musical Ghost" 3.5
  "Mystery of Monk's Island" 3.7
  "Mystery of Marauder's Gold" 3.9

- *Comics Code Authority Approved Comic Books*

  Gold Key Publishers

- *Classics Illustrated Junior Comics*

Suggestions for Teaching: At this point in his reading development, the reader will display some independence by saying he wants to read silently. Yet, at the same time, he will not want to give up the audience for his progress that you have been providing. It is best to let him read silently for short periods, after which you check his comprehension. When, in your judgment, he can read with understanding and meets your standards, let him advance on his own ahead of the rest of the class. Or, if you wish, you can use him as a monitor to help other readers who have not yet reached his stage of development.

Evaluation Check-Out: In addition to increasing his vocabulary, the reader should be able to:

- Draw logical conclusions.
- See relationships.
- Predict outcomes.
- Read for a definite purpose.

-for pleasure.
-to obtain the answer to questions.
-to obtain a general idea of the content.

- Use a table of contents and index.
- Use maps and charts.

Acquainting the Reader with Fourth, Fifth, and Upper Grade Vocabularies

The main objective of this unit of instruction is to understand classroom techniques for acquainting readers with fourth, fifth, and upper grade vocabularies.

Teacher's Goal: To develop students' reading skills and improve their vocabulary by:

- Reviewing and refining previously learned skills
- Introducing new words in content fields
- Understanding punctuation: Italics, parentheses, quotation marks
- Improving skills in the use of reference materials.

Teaching Procedures and Materials: Ask the student to choose his reading materials from the following list:

- *Deep-Sea Adventures*

"Danger Below"	4.4
"Whale Hunt"	4.7
"Rocket Divers"	5.0

- *Morgan Bay Mysteries*

"Mystery of the Myrmidon's Journal"	4.1

- *Comics Code Authority Approved Comic Books*

National Publishers
Classics Illustrated.

Suggestions for Teaching: At this stage of development, the reader will be spending more and more time browsing through other, more advanced materials in the room; he should also be reading outside of class.

You should provide textbooks, pocket books and the other texts previously described, and work with the student to develop his ability to use reference materials, as listed below:

- *The Encyclopedia*

  The topics are arranged alphabetically.

  Show the meaning of the characters on the spine of each volume.

  Compare dictionaries and encyclopedias for the different material each contains.

  Students should know names of important children's encyclopedias.

- *Atlases and Maps*

  Examine an atlas to find answers to questions on location, relative size, direction, and distance.

  Use maps to explain latitude and longitude.

- *Magazines and Newspapers*

  Explain their use as reference materials supplementary to encyclopedias, etc.

  Use local newspapers to do research on a current event.

- *Timetables*

  Practice reading and interpreting schedules.

  Practice following directions.

- *Card Catalogues*

  Explain that every book has its place on the shelf.

  Show that each class of books has its own call number.

  Examine cards: author, title, subject.

  Locate titles and call numbers of some books.

  Give the student the title of a book and ask him to use the card catalogue to find it on the shelf.

  Dictionaries.

  Telephone Book.

  Other Directories.

Evaluation Check-Out:

The reader should be able to:

- Interpret story ideas.
- See relationships.
- Identify moods.
- Describe an author's purpose.

- Identify character traits.

The reader should know how to use the reference materials listed above.

Developing Reading Skills Through Single Subject Articles

The goal of this unit of instruction on basic skills in the language arts is to understand how developmental reading and comprehension skills can be taught with high-interest commercial reading materials.

Teacher's Goal: To develop students' reading skills and cross-cultural and ethnic bonds through the use of high-interest, multi-ethnic, commercial reading materials.

Teaching Procedures and Materials:

Review issues of news, sport, music, car, television, and movie magazines, and choose interesting articles from these magazines. They should be chosen to motivate the student to read further into the subject matter in the encyclopedia, biographies, and other books.

Cut out appropriate photographs and pictures to support the articles you have chosen. Keep them intelligible, yet complete enough to convey the main themes of the original stories.

Assemble the materials in this manner:

- Type the story as you have rewritten it. At the introductory level, the type should be as large as possible. If you mimeograph, see that each page prints clearly.
- Tape the illustrations and photographs to the front of manila folders.
- Inside each folder, insert the texts you have prepared, together with any other relevant material, such as the words of songs or copies of interviews or speeches given by the personality pictured on the cover. Enclose a page of questions on the material.
- Assemble a selection of these folders covering many fields of interest, and figures of fame whom the students will recognize: President John F. Kennedy, President Richard Nixon, Dr. Martin Luther King, The Supremes, James Brown, Wilt Chamberlain, Bill Cosby, Petula Clark, Caesar Chavez, and other famous people.

Ask the student to choose whichever of the articles interests him, and have the student read the story aloud, either by himself or to you.

If the subject of the article is a singer or group of singers:

- Have the student read the words of the song you have included in the folder.
- Play a record by the singer, calling attention to how the words and their meaning are conveyed through the mood of the music.
- You might next lead a discussion of why or why not a particular song has *soul* and whether the music or words predominate, and how.

With a public figure whose speeches are available on record, you might follow the same procedure.

Ask the student to fill in the question sheet included in the folder and discuss his answers with him.

Suggestions for Teaching: When preparing the single article texts:

- *Keep in mind the reader for whom you are preparing the materials.* Generally, the student is more interested in concrete and practical things than in theoretical ideas.
- *Build on the interests of your students;* you must relate the classroom to the world outside.
- *Try to relate your topics to the student's socioeconomic group;* do not preach, prepare moral tracts, or stress values of any one class in preference to values of other classes.
- *Use a word list* when rewriting the material from the magazines. After writing your first draft, go through your material and try to substitute words from the list where possible.
- *Now go through your material again and make the sentences shorter.* Sentence length should vary, but an average of seven or eight words is desirable. Remove unneeded clauses, adjectives, and prepositional phrases.
- *Keep your paragraphs short,* not more than five or six sentences long. The paragraphs should vary in length, but avoid concentrating ideas.

- *Check your material to see how difficult it is to handle.* A readability formula will help. If the readability level is higher than you desire, substitute more words and reduce sentence-length further.

- *Test the material on a sampling of students.* To do this, delete every tenth word and see if the students can supply the missing word.

Evaluation Check-Out: The reader should show progress in his ability to:

- Find the main idea
- Follow the plot sequence
- Draw logical conclusions
- Recognize relationships
- Predict outcomes
- Interpret story ideas
- Identify moods
- Describe the author's purpose
- Identify character traits.

LANGUAGE ARTS GOALS - WRITING

Developing Writing Skills

The goal of this unit of instruction is to understand how writing skills can be taught through the use of such material as familiar comic strips.

Teacher's Goal: To expose the student to plot, mood, tone, character, conflict, climax, and conclusion; and to improve his abilities in interpreting these ideas so that he will be able to write creatively.

Teaching Procedures and Materials: This section on writing skills provides the student with a high interest stimulus field that will encourage him to react in a positive manner. The presentation of the material and the material itself assure that he will want to express his ideas in writing. Learning the mechanics of writing will not only happen naturally through his desire to express himself, but will be painless as well.

Because there is a natural relation between what people see and the words they use to describe it, the student will choose words and organize them into whole thoughts and compositions, according to the way he perceives things. Since this is a matter of individual interpretation and involves degrees of response rather than right-versus-wrong answers, there can be no wrong answer and, therefore, no threat to the student's ego.

Prepare your materials in this manner:

- Bring in a collection of comic strips from the Sunday paper. Choose strips that represent a series of events or actions, rather than those that depend completely on what the characters say in the balloons.

- Begin your collection with a very simple strip, involving one character in a situation that is fairly easy to interpret. Follow this with increasingly more complex selections, showing examples of plot, mood, tone, character, conflict, climax, and conclusion.

- Cut the words out of the balloons and paste the comic strips on pieces of paper. You don't always have to use every block of the strip as originally published, but only those essential to the development of the story line.

Show the strips to the student, in progressively more complicated groups. Ask him to interpret the pictures and to write what he thinks the characters are saying in the empty balloons.

You might find it advantageous to look for situations similar to the following, when looking in the usual comic strips:

- *Nancy:* here the stimulus field is simple; one character does one uncomplicated thing.

- *Peanuts:* this strip has a stimulus field slightly more complex - it includes another character, and the two personalities conflict. This comic strip can be complex because the writer often has to draw a conclusion after analyzing the behavior patterns of the characters.

- *Blondie:* a strip which represents much action and characterization. Dagwood does different things to solve his problem. This is also a complex comic strip, because the writer must analyze numerous behavior patterns.

Suggestions for Teaching: The student is first expected to write only small amounts at a time, but his work should gradually show more sophisticated observation, perception, and detail.

As the student writes his thoughts on paper, be careful not to interrupt his concentration or train of thought with comments of your own. Let him progress by himself from the more simple, concrete pictures to the complex, abstract pictures at the end of the sequence, until he tells you that he has written all he can or wants to. Do not judge his performance by your own standards or comment on it by saying something like, "Aw, c'mon, you can say more than that!"

Review with him his handwriting, his punctuation, and the clarity and completeness of his thoughts. Later, he will be ready to discuss with you what you feel he has missed in the pictures.

If you ever feel you are losing him, then you must pull back and let him go on at his own rate. Perhaps later he will want you to help with suggestions or comments on the pictures and his performance.

You can use the same picture or series of pictures more than once, even with the same student, by suggesting that he concentrate on another character in the picture. You will often find that he has a completely different interpretation of a picture he has already once analyzed. As the student matures, even over a period of just a few weeks, his values also change, affecting his insights and judgments.

Evaluation Check-Out: The student should be able to interpret and write a story or sequence of events including these elements:

- Plot
- Character
- Climax
- Mood
- Conflict
- Conclusion

STUDENT LEARNING ACTIVITIES

- Write a report on how reading, writing, listening, and speaking play a part in defining *language arts*.
- Use student materials and printed matter, as for example, *Ready to Read-Readiness*, *Easy-Reading Picture Story Books Series*, *Language Arts*, and *Common Words Book*, to learn different techniques for developing language-arts skills.
- Through independent study with programmed instruction materials, such as, *One-to-One a Practical Individualized Reading Program*, *Sullivan Reading Program*, and *Sullivan Reading Series*, to explore techniques used to teach developing reading skills in children.
- View films on language arts skills, such as, *Food for Fun*, *Language Arts Series*, and *On the Difference Between Words and Things*. Discuss the films afterwards.
- Bring in selected comic strips from your Sunday newspaper and in small groups demonstrate how you would use these strips to teach writing skills.
- Prepare a notebook of common words used in first, second, and third grade classes. Include in the notebook any techniques you would use to teach appropriate grade-level vocabulary.

- Outline the techniques shown in each of the sub-units of instruction in this unit. Save these sub-unit outlines for future use as a teacher aide.
- During a language arts class, visit an elementary class and observe the teacher and/or teacher aide.

TEACHER MANAGEMENT ACTIVITIES

- Assign a written report on defining language arts.
- Use printed matter and student materials to teach language arts skills, as for example, *Easy-Reading Picture Story Books Series* (Series 15), and *Language Arts*.
- Encourage your students to read programmed instructional material on developing reading skills, by such material as *Sullivan Reading Program, Sullivan Reading Series,* and *One-to-One a Practical Individualized Reading Program.*
- Show films on the language arts skills, such as, *Food for Fun, Language Arts Series,* and *One the Difference Between Words and Things.* Lead a class discussion after viewing the films.
- In small groups, have the students work on selected comic strips to practice this technique for teaching writing skills.
- Have your students prepare an outline of each of the sub-units of instruction in this unit.
- Arrange to have small groups of students visit an elementary classroom and observe a period of instruction in language arts skills.

RESOURCES

One-to-One, A Practical Individualized Reading Program (Multimedia), Warren Schloat Publications, 1972.

Ready to Read, Readiness (workbook), Bobbs-Merrill, 1969.

Everybody Grows Up, Franklin Wats, 1969.

Silly Sentences (Game), Houghton Mifflin, 1970.

Wild Animals Story Set (Game), Judy Company, 1969.

Language Arts, English and Reading (Sound filmstrip), Eye Gate House, 1970.

Easy-Reading Picture Story Books Series (Series 15), (Printed matter), 1968.

Beginning-to-Read Riddles and Jokes, Follett Educational, 1967.

Adventures in the City, Laidlaw Brothers, 1970.

Projection Reading Program Story Book, Grade II, CENCO Educational Aids, 1968.

AVAILABLE FROM BEHAVIORAL RESEARCH LABORATORY

Sullivan Reading Program, Series I through V (Programmed Instruction Books), 1969.

Sullivan Reading Series, Series I (Programmed Instruction Books), Textbooks 1 through 4, 1969.

Sullivan Reading Series, II (Programmed Instruction Books) Textbooks 5 through 8, 1969.

Food for Fun (Movie, 16mm reel), Stanton Films, 1969.

Moods (Movie, 16mm reel, rental), Indiana University A-V Center, 1970.

Language Arts Series (Filmstrip), 1970.

Projection Reading Program, Grade V, CENCO Educational Aids, 1968.

Fail-Safe, Eugene Burdick and Harvey Wheeler, Noble and Noble, 1969.

Language Arts, John Wiley and Sons, 1967.

How to Use the Library (Programmed Instruction Book), Allyn and Bacon, 1966.

Common Words Book (Workbook), Charles E. Merrill, 1968.

Language and Reality, (Grade 12), Holt Rinehart and Winston, 1966.

On the Difference Between Words and Things (Movie, 16mm reel, rental), Indiana University A-V Center, 1970.

Children Learn the Language Arts, Burgess Publishing, 1966.

Dr. Seuss Beginner Books, Random House (as listed on page 83).

Classics Illustrated Junior Comics, Dell Publishers, Miscellaneous issues.

Unit 6

EDUCATIONAL TECHNIQUES AND MATERIALS

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Unit 6

EDUCATIONAL TECHNIQUES AND MATERIALS

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the functions and characteristics of educational techniques and materials.
2. Ability to prepare materials, bulletin boards, and pictures coordinated with the curriculum and with the current interests and topics of the class.
3. Ability to demonstrate a working knowledge of how to operate various types of audiovisual machine equipment.
4. Ability to value the benefits of using audiovisual techniques and materials as integrated parts of the educational process.
5. Ability to appreciate how educational technology can help enrich and improve the conditions in which human beings learn and teach.

CONTENT

INTRODUCTION

Many new educational techniques have been developed to help both the teacher and learner in the classroom. Some of the newer methods being used in various schools throughout the country include programmed instruction booklets, individual learning activity packages, multimedia learning kits, microfilm, sound filmstrips, videotape recorders, and many other audiovisual techniques and materials. Currently the trend is increasing toward the effective utilization of this educational technology to help make learning more effective and more efficient.

This unit on audiovisual techniques and materials is designed to provide the learner with the basic knowledge of the simpler and more common forms of educational technology. The materials

and equipment mentioned in this unit are those with which a beginning teacher aide would most likely come in contact.

INSTRUCTIONAL TECHNIQUES AND MATERIALS

Definition of Instructional Techniques

Instructional techniques may be defined as: *"Any material or device which is used to assist an instructor in the preparation and presentation of instruction, and which expedites student learning."*

Instructional (or educational) techniques and materials contribute more than just an additional means of communication. Educational technology is a central part of the educational process. The teacher works "with" the materials and new educational technologies to accomplish the goals of education. Just as a jet pilot is a part of the airplane system with all its automated technology flying through the sky, the teacher is a part of the educational system with all its instructional technology in the learning environment.

The teacher aide must understand the key role that instructional techniques play in the learning process. Books, blackboards, films, tape recorders, programmed books, multi-media learning packages, and all the other educational technology are not merely "aids," but are major parts of the educational system.

Functions of Instructional Techniques and Materials

They save time. Collectively, the teaching of a 50-minute class to 30 students is equivalent to 1500 man-minutes, or 25 man hours. Suppose that, by the use of pictures to replace words, either in the form of slides, films, charts, or models, a saving in time is effected, amounting to 10 minutes of the class hour; this would mean 5 man hours. This applies only if there is no lessening in learning on the part of the class. The time saved can be used:

- to include other material, thereby broadening the student's background;
- to add more examples to what has already been presented, which will strengthen and support the student's understanding and comprehension;
- to review or test, which will reveal the effectiveness of the instruction and the level of achievement of the class.

They develop understanding. Verbal descriptions create mental

pictures which differ widely from student to student, depending upon association background. For example, the description *carbon deposits* presents one picture to a student who has worked or looked inside the cylinder head of an engine, and an entirely different picture to another student who has never done so. By showing the class an actual cylinder head just as removed from an engine block, with the pistons still in place in their cylinders, and with carbon on them, a uniform picture is presented to all students in the group. Understanding of the term includes a mental flashback to the picture.

Likewise, the procedure followed in an inspection is vividly retained from the showing of a film of a simulated or actual inspection, whereas an instructor explaining such a procedure orally would find the going difficult, due again to the various levels of experience in individual association backgrounds.

They create interest. The curiosity which drives humanity on to search and seek, to watch and wait, is one of the strongest motivating factors which the imaginative instructor can employ in making his points. For this reason, audiovisual techniques and materials fit into an area of learning which nothing else can occupy.

The motion picture film is particularly adapted to stimulating curiosity, since action takes place, usually in a form of sequence, and often leading up to an unpredictable climax.

Operational models and actual equipment perform the same function, in answering the question: *How does it work?* Often, the attention of the student is caught by some feature of the audiovisual aid which might otherwise have passed unnoticed - with a subsequent gap in the learning process.

There is a maxim in the psychology of education that *learning takes place best in a slightly favorable emotional environment.* This implies that a certain amount of humor or levity - not overdone - will attract and assist the student in learning. The audiovisual techniques and materials used by the instructor or aide provide an excellent environmental medium in this respect.

The element of humor may be included in some slides, posters, and charts without detracting from the technical information included. In others, what may sound confusing when explained orally becomes crystal-clear when shown on a diagram, with the result that the student says to himself: *Oh, I see it now.* Having achieved satisfaction, he is more acceptable to further explanation. The slightly favorable emotional environment has been provided.

They appeal to the senses. The five senses, - hearing, sight, smell, touch, and taste - can be effectively utilized with well-planned audiovisual aids.

Of these senses, *sight* predominates, and in the great majority of audiovisual aids employed, the appeal is directly to the sight of the student.

In actual practice, sight is not materially more effective, when used alone, than is *hearing*. A combination of *telling* and *showing* produces far better overall results. The percentages in the listing below (Figure 1) show the results of experiments carried out under controlled situations. The implication is that a combination of telling and showing is more effective in terms of greater recall of information than either method of communication used alone. This is an important concept for teacher aides to learn.

TELLING VS SHOWING		
Method of Communication	Recall 3 Hrs Later	Recall 3 Days Later
Telling Alone	70%	10%
Showing Alone	72%	20%
Blended Telling & Showing	85%	65%

Figure 1 - Telling, Compared with Showing

Other senses have limited applications, but are essential within their pertinent limits. *Touch*, for instance, is essential where any manual operation is to be performed, for the student must gain firsthand knowledge of the *feel* of the action. *Smell* adds to the knowledge gained concerning gases, solvents, and food. *Taste* is the most limited in application - primarily to water and food. It is closely related to smell; for example, when the nose is stuffed from a cold, there is an absence of taste of food.

Characteristics of Audiovisual Techniques and Materials

The effectiveness of an audiovisual aid cannot be determined by its size, complexity, or cost. Regardless of how elaborate or intricate, it still is not a substitute for the instructor.

Remember, one of the primary purposes of the audiovisual aid is to serve as an additional means of communication, and to be an integrated part of the course. However, there are precautions to remember when using audiovisual techniques. *Too many ideas presented at one time, or too much detail on any one audiovisual aid may kill the goose which lays the golden eggs.* To retain the effectiveness, and to eliminate the unnecessary, a discussion follows of those essential characteristics which every training aid should possess.

They Must be Legible. Whatever audiovisual aid is to be used must be seen or heard by every student in the classroom, whether in the front or rear row of seats. Otherwise the audiovisual aid fails to convey the information it contains.

The lettering on all types of visual aids must be large enough to be read with ease by all students in the class. All parts of a three-dimensional aid should stand out clearly. The number of labels or titles on a chart or slide should not be excessive to the point of confusing the reader. Remember, a student views an aid and gets a mental picture which is retained for some time afterward. What he cannot see or discern clearly remains a blank space in his mental picture.

They Must be Simple. The element of simplicity is tied in with legibility. There is a strong tendency for instructors to clutter up their pictures, charts, slides, blackboards, models, or mock-ups, with the last fine point in detail. This detail cannot be remembered by the student, and often the overwhelming amount of details prevents his understanding of what he does see, or causes him to look elsewhere than at the aid.

People are inclined to read columns of newspaper print if the headline catches their eye, but the headline condenses the coverage to a short, terse phrase. The same principle can advantageously be applied to the visual training aid. A series of progressive pictures - each carrying a small portion with its own explanation - is far more effective than one complete picture which is a composite. The same rule applies for models, for training films, and for student handout material.

They Must be Colorful. Psychologists have long known that color has definite appeal. Merchandisers have used color to sell their products, based upon exhaustive tests to determine which colors have the greatest eye appeal. In using color on visual training aids, two principles predominate:

- *They Must Have Contrast.* Where the flow diagram of a piece of equipment is represented, the actual flow should be given a strong color contrast against the remaining background.

This likewise applies to wiring diagrams, and to individual systems for such areas as cooling, fuel, lubrication, etc. Where an operation is depicted, the moving parts being actuated should contrast with the parts which do not move. Just as he is able to recognize the red *stop* and the green *go* of the traffic light, so is the student able to recognize these items which, because of their color, stand out in contrast.

- *They Must Have Realism.* The more nearly the aid resembles the actual object, terrain, or building, the more easily the student, by association transfer, can retain the mental image he has seen. He accepts it because it looks natural. In certain instances the color furnishes the chief bond to realism.

  Substituting actual colors of objects in contrast with black and white pictures, particularly where the major areas are water, vegetation, or landscapes, makes for easier *reading* of the picture by the student.

They Must be Accurate. Now that the essential characteristics of legibility, simplicity, and color have been checked, the content of the aid must be reviewed for its technical accuracy. If even one part of the visual aid is inaccurate, some student is certain to remember that inaccuracy regardless of what is said by the instructor to correct the impression. Once learned the wrong way, this error tends to be perpetuated. For example, the erroneous method of spelling and pronouncing *preventive* has found its way into conversation. It is often the teacher aide's responsibility to double-check all aids the teacher intends to use in teaching a class, to insure that no errors are included therein.

They Must be Manageable. There are two factors to consider in regard to the manageability of audiovisual aids and materials.

- *They Must Have Mobility.* The size and weight must be such that the audiovisual aid can be easily transported from place to place, as fortunately most audiovisual devices are. Some large machines, models, and mock-ups require that they be installed on a permanent basis, in which case all classes where these aids are employed must be held in the classroom or building where the aid is located. This limitation may not be serious, so long as classes do not overlap.

  The time to consider the design of the aid is before it is constructed, rather than afterwards. Frequently, consideration of the mobility of the aid to be constructed will result in design changes to decrease size or weight.

- *They Must be Instructor Operable.* The materials used should be easily manipulated by the instructor during his class. They should not be subject to design weaknesses which might contribute to difficult operation or instability. This also means the equipment should not come apart in the instructor's hands.

  Students are impressed with the ease, or the difficulty, with which the instructor manipulates his materials and audiovisual equipment.

They Must be Durable. Instructional materials are subject to considerable wear and tear. Normal handling and transportation can easily destroy their effectiveness, unless they are properly constructed. Replacement is often expensive, not to mention time-consuming. The aid which is obviously fragile is not likely to be seen by many students during its short life. If outside use is likely, some method of waterproofing is desirable. *The emphasis placed on economy means that the teacher aide should obtain the greatest amount of use at the lowest possible cost from every aid employed.*

They Must be Realistic. The last characteristic of audiovisual techniques and materials to consider is that of realism. If the actual object or situation under discussion can be presented to the class, the learning becomes intensified, and the atmosphere of artificiality is dispelled. This implies that pictures should include the element of background. Representations of equipment operation should show an operator with action taking place. By this method, the student can project himself into the situation, and accepts what he sees more readily.

Scale is another important consideration, particularly on pictorial matter; and the employment of color should not be overlooked. As a rule, training films rate high in realism, and are particularly effective due to this characteristic.

This concludes this section on the functions and characteristics of audiovisual techniques and materials. The following section will deal with some of the more common techniques a teacher aide should be aware of in order to use audiovisual equipment and materials in the classroom.

COMMON AUDIOVISUAL TECHNIQUES AND MATERIALS

Chalkboards and Bulletin Boards

Certainly the chalkboard or blackboard is one of the simplest instructional aids available. Yet, many new teachers fail to

use the chalkboard to its best advantage.

The adaptability of the blackboard to all situations makes it indispensable to formal instruction, either in class or out. No other instructional aid is so consistently at hand during the teaching situation.

Good blackboard work doesn't just happen all by itself. It must be planned and rehearsed. As the teacher's aide makes his lesson plans, he should have a number of stock questions to ask of himself. They might run somewhat as follows:

- What part of the lesson can best be emphasized by use of the blackboard?
- What diagrams will best illustrate the difficult points in the lesson?
- What is the best possible arrangement of the material?
- What portions of the blackboard work are best put on the board before class, and which are better put on during the class?

The answer to these questions can be determined by experimenting with the material selected, by placing it on a blackboard, and by sketching the final layout on the lesson plan. The entire problem must be considered in the light of the type and the amount of blackboard space available, the possibilities of conserving time, and whether or not the points will be developed in the class.

As with the use of other aids, it is not good technique to talk while working at the blackboard. Neither is it considered good technique to erase hastily with the hand or fingers. The result is usually a distracting smudge that destroys the neatness of the presentation. The blackboard is a visible voice that substitutes for the audible voice.

Bulletin Board Displays

A good teaching bulletin board display should have the following parts:

- *A headline*. The headline should be bold, attention-getting, clear, and concise. It is usually a statement of fact or a question that is verified or answered by the rest of the material on the board.
- *A dominant element*, something that stands out above all else. It should draw the viewer's eye to the board and should present boldly the message of the display. It usually is larger than any other part of the display.

- *Illustrations* that enlarge on, verify, or clarify the heading and the dominant element.
- *Concise and clear captions* that identify the illustrations.

The teacher's aide should plan displays and display boards well before he begins producing the materials or arranging the board. A good technique is to start by preparing a layout to scale so that the aide can devise an attractive arrangement, experiment with colors and shapes, and consider relative sizes of material. This will insure good composition, unity, good use of color, and proper fit in the desired display area.

Bulletin board displays should be arranged attractively, have unity, be colorful, and show originality. Backgrounds should be nothing but backgrounds. They should be of pastel colors and should not distract from the message of the board. Three colors in addition to the background should be enough; too many colors can be distracting.

One final rule is to keep the board simple. Too much material can be confusing. Present only one major idea. Odd numbers of illustrations are usually easier to arrange than even numbers. Always have a purpose in mind before starting to plan the display board.

Table Displays

Table displays offer an excellent opportunity for presenting real, concrete objects in an organized manner, and children enjoy preparing this type of display. Simplicity, attractive arrangement, harmony between objects, and clarity of the display are important.

Flat Pictures in the Classroom

Teacher aides should recognize the importance of using flat pictures in the classroom. These materials should be related to the current interests of the class, such as holidays, field trips, careers in educational services, and other special events, such as guest speakers or visitors.

Uses. The classroom uses of flat pictures include:

- creating an environment and atmosphere that aids learning,
- making the classroom more attractive,
- motivating students to learn,
- provoking interest or wonder,
- reporting the progress of current events,

- teaching an idea, objective, or lesson, and
- presenting key ideas or impressions that must be studied at length.

Techniques. In addition to the many uses of flat pictures, there are specific techniques of using them. Some of these methods are:

- for specific educational purposes,
- for use in the teaching lesson with specific objectives, and
- for artistic reasons.

Evaluations. Questions to consider in evaluating a picture for classroom use are:

- Is the picture suitable or technically correct?
- Does it have a center of interest and is it realistic?
- Are the details clear?
- Does it show relationships?
- Is it effective in color or contrast?

PREPARING AUDIOVISUAL MATERIALS

Lettering Instructional Materials

Teacher aides should become familiar with the basic lettering devices and materials. The following materials are generally available from art supply and drafting supply stores:

Rubber-stamp letters. There are many sizes and types of rubber-stamp letters available. Their advantages are that they are economical, and good for bulletin board captions.

Stencils. Stencils can be made of either interlocking metal or paper, and they come in many sizes and styles. The primary advantages of stencils are that they are economical, and easy to use. Techniques for stenciling include *spraying over*, *tracing*, or *filling-in*.

Speed-ball Pens. There are many styles and sizes of speed-ball points available. While they are economical and convenient to use, they require considerable practice for proficiency.

Paintbrush. This lettering technique can be very effective, but it is a difficult technique requiring much practice.

Mechanical lettering devices. Mechanical lettering devices include:

- Wrico type plastic stencils with guides, which give a very professional lettering.
- Mechanical scribers, such as LeRoy, also professional looking, although they may be a little more expensive.

Handmade Transparencies

A common instructional technique which teachers' aides need to acquire is the preparation of single or overlay transparencies for projection on an overhead projector. The aides should be able to utilize, for this usage, such audiovisual instructional materials as Ditto-masters, transparencies, films, slides, charts, posters, photographs, models, maps, and pamphlets.

Materials required. The basic materials needed to prepare handmade transparencies include:

- *Ceramic or grease pencils.* These are now available in many types from many sources, and many of them are made specifically for use on transparency materials. Most project a black, opaque image on the screen, but some project the color of the pencil.
- *Markers of many types:* Permanent and water-soluble markers with felt, nylon, or bamboo tips.
- *Acetate:* This can be bought in long rolls, either clear or acetate, that can be attached to the projector, as well as in sheet form in a variety of sizes and thicknesses. One of the least expensive types of acetate material is cleared X-ray film, which can be purchased in quantities for three cents or less, for a 10" x 12" sheet. Colored acetate sheets, plain and adhesive-backed, are also available.
- *Inks.* India ink and special acetate inks in various colors.
- *Tapes.* Adhesive tapes, opaque and transparent, in various colors.
- *Transferences.* Dry transfer rub-off letters, patterns, and designs, opaque or transparent, in a variety of colors and letter sizes and styles.
- *Lettering Devices.*- as previously listed.
- *Other Materials.* Other materials, such as:

  Drawing boards and T-squares.
  Typewriter and reproduction carbon.
  Cut-out silhouettes.
  Transparency mounts.

Method of Preparation. The simplest type of transparency to prepare is that made by hand for temporary use. This can be done by writing or drawing on a piece of clear acetate or plastic with a ceramic or grease pencil, or with a water-soluble felt, nylon, or bamboo marking pen. Frosted acetate can also be used with nearly any writing tool, but the image will not project as clearly as one on clear acetate.

Place the clear acetate directly over material in books or pamphlets and trace the image to be projected. In order to color large areas, it is a good idea to use water-soluble felt pens or special grease pencils that project the color of the pencil lead.

"Thermofax" or Other Heat-Process Transparencies

Material Required. The 3M Company makes many types of heat-sensitive transparency films for preparing transparencies with the "Thermofax" copy machine (Thermofax is a registered tradename). Here are brief descriptions of some:

- *Type 125 Etched Image Positive:* This transparency material produces a frosted white image that projects as a black image on a white background. A colored pencil can be used on the back-side of the transparency to add color to the image. This material is available in 100-sheet packages.
- *Type 127 Direct-Reading Image Positive:* This transparency material produces a black image on the film and projects a black image on a white background. Type 127 is the easiest to read on the projector stage. It is available in 100 sheet packages.
- *Type 129 Tinted Direct Reading Image Positive:* This transparency material produces a black image (similar to Type 127), but on a background tinted red, blue, green, or yellow. It is available in 100-sheet packages of each color.
- *Type 133 Economy Direct Reading Image Positive:* Available in 500-sheet packages only, this is a lightweight transparency material that produces a black image on the film (similar to Type 127), and projects a black image on a white background.
- *Type 128 Color Negative:* This transparency material produces a colored image on a dark background. It is available in 100-sheet packages of silver, red, blue, green, or yellow.

Method of Preparation. The "Thermofax" machine produces transparencies for projection on overhead projectors. This process of transferring original material to heat-sensitive transparent projection material is simple and quick. Although colored

materials normally will not reproduce, almost any black and white material can be copied, if the master meets certain specifications.

Make sure that the lines and markings on the original copy are of a mineral-base material: typewritten, commercially printed, mimeographed, or carbon copy; or drawn with a black pencil, India ink, or a type of marking pen that will reproduce.

The master should be on white paper (you may use tracing paper) and should not be larger than 8½" x 11". In order to reproduce text or pictures from a book or pamphlet, remove the pages from the binding.

The "Thermofax" Process does not destroy the original, which can be used over and over again. After preparing or selecting the master, follow these steps to produce the transparency:

- Each sheet of heat-sensitive "Thermofax" film has a notch in one corner. When you place the film over the original, be sure that the notch is in the upper right-hand corner.
- Pass the transparency and the original through the "Thermofax" copy machine, setting the dial halfway between the buff and white settings. The proper setting may vary from machine to machine. If the copy is too light, set the dial for a slower setting; if it is too dark, set the dial for a faster setting.
- As the material comes from the copy machine, separate the original from the transparent copy. The transparency is ready for projection in a few seconds.

"Diazo" Transparencies

Method of Preparation

- Prepare a master on transparent or translucent material. Use India ink, black pencil, tape, or cut-outs of opaque paper or carbon materials. The silver foil that accompanies each sheet of "Diazo" film ("Diazo" is a registered trademark) is excellent for making opaque cut-outs. The cut-outs can be attached to the master with transparent tape. The image on the master should be as opaque as possible.
- Decide the color of the image you desire. Position the master with its image side in contact with the dye side of the "Diazo" film. To discover which side of the film is the dye side, find the notch in one corner. When the notch is in the upper right-hand corner, the operator is looking at the dye side.

- Place the master and the "Diazo" film into the printer so that the light will shine through the back of the master. Expose to ultraviolet light for the required amount of time (usually two to three minutes). Since this time varies with different printers, make tests to determine the proper exposure time.
- Separate the exposed film from the master and place the exposed film in the ammonia container. The operator will be able to see the image develop. Developing usually takes no longer than did the exposure. When the image has developed to the color desired, remove the film from the container. It is now ready to mount and project.

Combination Methods. A combination of two or more of these methods often produces quite effective transparencies for overhead projection.

AUDIOVISUAL MACHINE EQUIPMENT

A teacher's aide should have a good working knowledge of the various types of audiovisual machine equipment. He is expected to assist the teacher in obtaining, setting up, operating, and returning instructional equipment. The aide should become familiar with 16mm film projectors, 8mm film projectors, 35mm filmstrip projectors, 35mm slide projectors, overhead projectors, opaque projectors, tape recorders, photographs, "Polaroid" type cameras, projection screens, and controlled reading projectors. The operation and uses of different audiovisual equipment are discussed below.

The Opaque Projector

Advantages. The opaque projector has many advantages:

- The class pays attention,
- The preparation of materials for projection is not difficult and does not use up valuable classroom time,
- The teacher can face the classroom while presenting information,
- Opaque materials can be projected,
- A wide range of available teaching items can be used: books, magazines, maps, illustrations, three-dimensional materials, student work, etc., and
- The opaque projector can be used for individual and group instruction.

Disadvantages. Likewise, the use of the opaque projector presents some disadvantages:

- The room must be darkened.
- The Opaque Projector is bulkier than some other projection equipment.

Method of Operation. The operation of the opaque projector is relatively simple:

- The lamp, with help from the reflector, shines light on the stage.
- The projector has a 10" x 10" stage.
- Material on the stage is reflected to the mirror.
- The mirror reflects the image through the lens.
- The lens projects, focuses, and enlarges the image on screen.
- The pointer projects an arrow on the screen.
- The tray is used to project flat materials; a glass plate on the material keeps it flat and protects it from excessive heat.
- The roller, a continuous rubber-tracked device, moves materials, such as study prints, opaque rollers, and long pictures or visuals, through the projector.
- The platen (or stage) projects books, three-dimensional objects, etc.

The Overhead Projector

Advantages. The overhead projector is a daylight projector. The classroom lights are left on while the projector is used, and blackout curtains are not necessary. The teacher does not need to interrupt the lesson to prepare the room for using the projector. The overhead projector has many of the advantages of the chalkboard, but it has neither the dust nor the mess. It remains in the front of the room, and it is easy for the teacher to use while he is sitting at his desk. The teacher faces the class and writes on transparencies that are then projected behind him large enough for the whole class to see. A projected image makes a bigger impression on a student than the writing on a chalkboard.

There are many prepared transparencies available for use with the overhead projector. Teachers and students can also make materials for projections, and can do many interesting things with the transparencies. They can use colors, write on the

image for increased emphasis, cover up part of the image for a quiz, expose textual material one line at a time, and use their imagination to respond to the needs of the class. In addition, the teacher's aide can save all the transparencies for future use; the lesson doesn't disappear as it does when the chalkboard is cleaned or erased by accident.

Disadvantages. The disadvantages of the overhead projector do not outweigh its advantages. Although the material used for projection must be transparent, and the cost of commercially prepared materials is relatively high, teachers and aides who use time and imagination can prepare their own effective visual materials.

Moving-Picture Projectors

Teachers' aides should be familiar with the operation features of film projectors. Accordingly, a brief discussion is presented on the sound, mechanical, and optical systems, of one of the most common audiovisual devices - the 16mm sound projector, together with short operational suggestions:

The Sound System. The sound system of the 16mm movie projector has the following components:

- The *sound track* is on the film. On most sound motion pictures, the sound track is along the edge of the film.
- The *sound drum* is a smooth surface for the film to travel over as it receives light from the exciter lamp.
- The *exciter lamp* provides a constant light source to the sound track.
- The *photoelectric cell* picks up the variable light patterns coming through the sound track on the film and converts them to electrical vibrations.
- The *amplifier* amplifies or enlarges the vibrations and sends them on to the speaker.
- The *speaker* changes the electrical vibrations into sound vibrations.

The Mechanical System. The mechanical system of the 16mm sound projector has the following components:

- The *full reel of film*, placed on the feed reel arm.
- The *empty reel*, placed on the take-up reel arm.
- The *drive sprockets* fit into the sprocket holes on the edge of the film and move the film through the projector.

- The *film channel* is a smooth channel for the film to pass through as it passes the aperture where the light shines through the film. The film gate locks the film in this channel.
- The *claw mechanism*, or *shuttle*, brings each still picture in front of the aperture at the rate of 24 pictures per second.
- The *shutter* coordinates with the shuttle to shut out light while the film is being moved.
- *Film loop* - it is necessary to have a film loop above and below the film channel so that the film will not be torn as the claw mechanism draws it past the aperture.

The Optical System. The optical system of the 16mm sound projector has these components:

- The *master projection lamp* generates the light beam to project the image on the screen.
- The *reflector*, behind the lamp or in the lamp itself, concentrates the light from the lamp in the direction of the condenser lenses and the aperture.
- The *condenser lenses* concentrate the light on the film at the aperture opening.
- The *projection lenses* focus the image on the screen.

Projector Operation. The various makes and models of projectors have different threading procedures. Before threading the projector, study the threading diagram inside the machine, and follow it carefully. These two points will help to determine whether the film is properly wound on the feed reel:

- The film should come off the reel in a clockwise direction.
- The picture should go through the projector upside down and backward.

A teacher's aide should understand the *starting procedure:*

- Unpack and assemble the projector.
- Connect the power cord and check for power at the projector.
- Prefocus and position the machine to obtain the proper size of picture on the screen.
- Turn on the amplifier.
- Thread the projector.

- Check the threading by hand.
- Start the motor.
- Turn on the lamp.
- Focus and frame the image.

The teacher's aide should also understand the *stopping procedure:*

- Turn off the light.
- Turn off the sound.
- Turn off the motor (after cooling the bulb).
- Rewind the film.
- Unplug the power cord.
- Disassemble and repack the projector.

Record Player

A record player should be part of the equipment of every primary classroom. Therefore, teachers' aides must be familiar with its operation. This device can be an effective substitute for a piano, and many recordings of music, stories, rhythms, games and songs are available for young children.

Most modern record players can play recordings at three or four speeds: 16, 33-1/3, 45, and 78 revolutions per minute (RPM). Most recent educational recordings are on 33-1/3 RPM discs. The proper needle must be used for each type of recording; the microgroove needle should be used for 16, 33-1/3, and 45 RPM recordings, and the standard needle for 78 RPM recordings only.

Method of Operation. The record player is operated in this manner; instruction manuals with each player may have other suggestions:

- Place the machine gently on the table, open the case, and set the speaker (if separate from player) where all will be able to hear.
- Insert the speaker plug in the speaker jack of the record player (if the speaker is separate from the player), and plug in the power cord.
- Select and set the correct turntable speed.
- Select the proper needle (microgroove or standard) for the record to be played.
- Adjust the tone-arm weight control if necessary.

- Unlock and lift the tone-arm. Place the needle gently in the run-in groove near the edge of the record.
- Adjust the volume and tone controls for the greatest listening satisfaction.

Tape Recorders and Players

Uses of Tape Recorders. The tape recorder and player can be used in many ways in the primary classroom:

- *Reading readiness* - The tape recorder helps make children conscious of the sounds in the world about them. It helps them distinguish between sounds, and enables them to hear their own voices and the way they pronounce words and sounds.
- *Speech correction* - As the child hears the words and sounds properly pronounced, he can compare his own speech and correct it.
- *Developing creative expression* - The child can talk freely to the impersonal and uncritical tape recorder, and thus gain confidence in his ability to express himself.
- *Music* - Music of all types can be recorded and used for rhythm, dance, play, art, and other activities. It can be used as background for rest periods, lunch periods, etc., and to give the child an appreciation for music.
- *Story telling* - The tape recorder is an excellent way to enhance story telling. A pretaped story gives assurance that the story will be told in sequence. While the tape is being played, pictures, chart drawings, flannel-board figures, and puppets can be used to bring the story to life, and to give expression to the students' imaginations.

The Reel-type Recorder. Most school tape recorders are dual-track recorders, operating with tape on reels. Dual-track recorders use the full length of both sides of the tape for recording.

Magnetic Tape Used in Tape Recorders. A knowledge of magnetic tape, with the types, sizes, etc., is helpful to the teacher's aide. Magnetic tape is a long strip of plastic, either acetate or "Mylar" (Mylar is a registered trademark), coated on one side with a thin coating of iron oxide, and wound on reels of different sizes. One side of the tape is glossy and is called *backing*. The iron oxide coating is on the dull side, called the *working* side.

The microscopic bits of iron in the iron oxide coating are nagnetized. When the machine is recording, these bits line

themselves up according to the sound vibrations received from a magnetic recording head. Until the tape is *erased*, these iron bits stay in the same position. You can play the tape back through the recorder and hear an almost exact replica of the sound you recorded. The recording can be erased completely from the tape by magnetic methods, and a new recording made on the same magnetic tape.

Magnetic tape can be purchased on reels varying from 3 inches in diameter, holding 150 feet of standard tape, to 10-1/2 inches in diameter, holding 2,400 feet of tape. Most tape used for educational purposes is on five- or seven-inch reels. A five-inch reel holds 600 feet of standard tape, and the seven-inch reel holds 1,200 feet. Extra thin long-playing tape with a "Mylar" base will give one-half again as much, or even twice the playing time. This thin tape, however, may be more prone to break than thicker tapes. The teacher's aide should consider the wear and tear on a tape (as measured by the number of starts and stops) before choosing a particular tape thickness.

Recording Techniques of Tape Recorders. The operating speed of any tape recorder is measured in inches per second (ips). This is the speed at which the tape travels across the recording, play, or erase heads. Most school recorders have operating speeds of 3-3/4 or 7-1/2 inches per second. Some also operate at 1-7/8 ips. The operating speed of the recorder and the size of the reel used will determine the playing time of the recording.

A one-hour recording can be made on a 5-inch (or 600-foot) reel of magnetic tape when the recorder speed is set at 3-3/4 ips. If a 7-inch (or 1,200-foot) reel is used, the aide will be able to record for twice as long. If the speed at which the recorder is operated is changed to 7-1/2 ips, he will be able to make only a 30 minute recording on the 5-inch reel, and a one-hour recording on the 7-inch reel. The quality of the sound reproduction generally increases with the speed of the recorder: 1-7/8 ips is used for voice reproduction only; 3-3/4 ips is sufficient for good voice reproduction and for some music; 7-1/2 ips produces the best reproduction of music.

Method of Operation. The controls will differ on various tape recorders, and the aide should follow the operating manual furnished with the recorder. However, this step-by-step procedure should prove helpful:

- Place the tape recorder on a table with the speaker facing the class. Remove the lid. Remove the accessories (tape, empty reel, power cord, microphone, etc.). Plug the power

cord into the machine, if it is not already attached; then plug the cord into a wall outlet.

- Turn the switch to ON. This switch usually controls the tone as well. Set the tape speed control to the speed desired. Switch on the play or forward control to see that the recorder is operating. Return the play or forward control to its OFF position.
- Place the full reel of tape on the left spindle (as you face the recorder). Place the empty reel on the right spindle. The tape should come off the full reel counter-clockwise with the shiny side of the tape on the outside or toward the operator.
- Pull out about 12 to 18 inches of tape and place it vertically in the tape slot. Be sure that the shiny side is toward the front facing the machine. Thread the loose end of the tape on the empty reel. Make a small loop at the end of the tape, to help threading it onto the empty reel. Turn the reel two or three times by hand.
- Insert the microphone in the microphone input jack. It is now ready to record.
- Engage the recording control. To do this, switch on the safety control, which prevents accidential erasure.
- Speak into the microphone and adjust the volume and tone controls using the recording-level indicator as a guide. It is a good idea to record a short section of tape and then replay it to check the volume and tone control before making a long recording.
- When the recording is completed, rewind the tape, using the fast rewind control. Stop the recorder. Now turn on the play control and adjust the volume and tone controls.

Cassette Tape Recorders. Cassette tape recorders and players are becoming increasingly popular for educational use. They are very economical, and require no tape threading. Another advantage of tape cassette recorders is their flexibility for individual study. Many teachers are preparing taped lessons on cassettes, combined with other instructional materials, thus, producing independent listening exercises, or *audio-tutorial programs*.

SUMMATION

The role of educational technology is just beginning to be realized in American education. The teacher's aide should understand the role and purposes of the numerous instructional equipment and materials currently available. He must see that *this new technology is a part of the learning process - an*

integrated part of the curriculum. Movies should not be shown simply because it is a rainy afternoon and there is nothing to do. Movies should be shown because they are a key part of the program; because they relate to the goals and objectives of the class.

STUDENT LEARNING ACTIVITIES

- Write a short essay defining the role of educational technology in the classroom.
- Prepare an outline showing the primary functions and characteristics of instructional techniques and materials.
- View and discuss such films on preparing instructional mateials as, *How to Make Lantern Slides*, *Lettering Instructional Materials*, *Preparation of Audiovisual Materials Series (Series 9)*, *Tape Recording for Instruction*, and *Wet Mounting Pictorial Materials*.
- In small groups, plan and make a display bulletin board on current topics of interest to your class.
- Prepare a flat picture for classroom use. Follow the guidelines herein, and

  Use generous margins.
  Use mounting materials suited to the subject of the picture, and to complement the picture rather than draw attention away from it.
  Use colors that direct attention to the picture rather than to the mount.
- Develop your skills in lettering by making letters for use in classroom displays.
- Prepare single or overlay transparencies for projection.
- With previously-prepared transparencies, use an opaque or overhead projector to make a short presentation to the class.
- Prepare the classroom for film showing by:

  Making sure that the room is properly ventilated,
  Arranging the seating and the screen so that all students will be able to see and hear,
  Carrying out the preparations with the least possible interference with other activities going on in the classroom,
  Letting the teacher know that everything is ready for showing and that you can start on his signal, after room and equipment are ready.
- Prepare a 5 - 10 minute unit of instruction using the tape recorder (or tape cassette) and at least one other instructional medium; as for example, written instructions, pictures, or overhead projector.

- Visit an audiovisual center (or Instructional Resources Center) and talk with the center personnel about the value of educational technology in the classroom.

TEACHER MANAGEMENT ACTIVITIES

- Have the class prepare an essay on the role of educational technology in the classroom.
- Encourage each student to keep a notebook on instructional techniques and materials showing their functions and important characterisitics.
- Show films on various instructional techniques and materials such as, *Use of Transparencies*, *Preparation of Audiovisual Materials Series (Series 9)*, *Lettering Instructional Materials*, and *Tape Recording for Instruction*.
- Divide the class into groups and have them prepare display bulletin boards on current events.
- Obtain materials for the class so members can prepare flat pictures suitable for classroom use.
- Have the students practice making letters by allowing them to prepare the classroom displays and bulletin boards.
- Obtain materials for making transparencies, and allow each student to use opaque or overhead projector to present his transparency to the class.
- Allow the students to prepare the classroom for showing films, and have different students actually run the movie projector.
- Have your students choose a short (5 - 10 minute) presentation utilizing the tape recorder and at least one other instructional medium (written instructions, pictures, or overhead projector).
- Arrange to have small groups of students visit the local audiovisual center (or Instruction Services Center) and discuss with center personnel the value of educational technology in the classroom.

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Unit 7

TESTING AND EVALUATION

Here are the contents for Unit 7 of the Education group. We suggest a careful reading of it before you read the text.

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Unit 7

TESTING AND EVALUATION

INSTRUCTIONAL OBJECTIVES

1. Ability to plan a program of evaluating pupil growth and development.
2. Ability to become aware of specific evaluation methods directly related to scholastic performance.
3. Ability to become familiar with some of the instruments of evaluation and the standards by which they are established.
4. Ability to learn how to administer a test or battery of tests.
5. Ability to demonstrate a knowledge of different scoring devices.
6. Ability to discuss and use different grading systems.
7. Ability to understand the difference between *normal curve* evaluation and *criterion referenced* evaluation.
8. Ability to recognize the basic strengths and weaknesses of educational tests and evaluation techniques.

CONTENT

INTRODUCTION

With the increasingly important role being played by teachers' aides in the classroom, there is a real need for them to understand basic concepts of educational testing and evaluation. *The term evaluation refers to the summing-up processes in which value judgments play a large part, as in grading and deciding when to promote students.* The teacher's aide should be able to help the teacher plan a program of evaluating pupil

growth and development. It is important that the aide understand that the proper use of *measurement (the administration and scoring of tests)* permits an approach to education based on child development - rather than the rote approach, which is based on subject matter to be learned or memorized.

This unit will deal with these two closely related functions, educational testing or measurement, and evaluation skills. *In short, measurement refers to a score, while the interpretation of whether that score is good or bad is evaluation.*

There are basically two reasons for educational evaluation. One is for *accountability:* is the instructional program accomplishing its goals and objectives? The second reason for evaluation is to *improve the educational program.*

In addition, here are some specific purposes for evaluation:

- adapting the instruction to the differing needs of individual pupils,
- educational guidance,
- personal guidance,
- overall appraisal of the school program, and
- providing a basis, through reports to parents and school patrons, for improving public opinion.

EVALUATION - FOR WHAT?

One of the first questions that teachers or aides must ask in regards to testing and evaluation is: "what is to be evaluated?"

Intelligence. Psychologists have many definitions of intelligence. One of the more popular (but not universally accepted) definitions is that *intelligence is that which a properly standardized intelligence test measures.* In other words, according to this definition, a person' intelligence is no more or less than a particular score on a particular test.

Alfred Binet was the father of modern intelligence testing. In 1904 the French Minister of Public Instruction commissioned Binet to determine a workable method for *identifying* mentally retarded school children so that they might be given special instruction and help. Accordingly, Binet came up with the first standardized tests of intelligence. Binet characterized intelligence as *inventiveness depending upon comprehension and ability to maintain direction or purposefulness.*

Different types of intelligence tests are described later on in this unit. It is sufficient to say at this point that intelligence tests have been primarily used as a *diagnostic tool* to help identify individuals with special needs. This includes helping retarded students or very gifted students with special educational programs.

Interest. Interest is another trait or characteristic that teachers and aides may want to evaluate. *Interest is a tendency to pay attention to and usually enjoy some activity or content.* A teacher's aide might want to evaluate a student's attitude about an education program. This would be done by evaluating the student's interest in the course.

Achievement. *Achievement refers to a student's acquired ability.* Achievement tests, therefore, measure the amount of learning a student has acquired in a course.

Aptitude. *The student's capacity or potential for learning is his aptitude.* Aptitude tests are used to *predict* the outcome of training. For example, if a teacher wants to predict future typewriting ability on the basis of present ability, he would use an *aptitude test.* At the finish of the typing course, the teacher might then want to administer an *achievement test.*

Physical status. Since good physical health is important in terms of just about everything a person does, the teacher quite often will want to know about the physical condition of his students. Learning ability and health are closely related. In fact, some learning disabilities are caused by physical diseases. Teachers' aides should be aware of this fact, and, in discussion with their teachers, recommend that any student suspected of having a physical learning disability be given a thorough physical examination by a physician. The physical examination should be followed by examination by a psychologist, if the school has one available to it.

Emotional status. *Emotional status refers to the mental health, as opposed to the physical health of the student.* Emotional stability is related to psychological health. Attitudes, feelings, and other student behavior are all affected by the emotional health of a student. Although teachers or teachers' aides normally evaluate the student's *attitudes*, an expert such as a school psychologist or counselor should be brought in to help out if a problem is suspected.

METHODS AND USE OF EVALUATION

Evaluative Methods

Teachers' aides need to become aware of the more common evaluation usages directly related to scholastic performance, as:

- *Scholastic Aptitude*. The grades a student has earned in preceding studies are used to evaluate scholastic aptitude. The best predictor of a student's ability to succeed in future schooling is some measurement of his past school achievement. *However, great care must be taken not to prejudge a student solely on the basis of past grades.*
- *Scholastic Achievement*. This assessment is based on scholastic marks earned in earlier grades, various standardized and teacher-made achievement tests, survey and diagnostic tests of basic skills, school activities, and work experience.
- *Special Abilities*. These include clerical, mathematical, artistic, musical, mechanical, and other abilities. They may be subdivided into categories, such as musical memory, mechanical ingenuity, or scientific reasoning, or into occupational fields such as health, public service, or construction. The various means of appraising these abilities include printed tests, products made by students, oral interviews, and evaluation of students' previous achievements and performance.
- *Personal Interests and Plans*. This information, in conjunction with other bits of information, can be used to predict whether a student will stay in a particular field of study. Some evaluative methods deal with expressed likes and dislikes of the student; others attempt to determine his latent interests.
- *Home and Family Relationships*. Home and family relationships, emotional and social adjustment, and attitudes; these can be grouped together since they are so closely related. Sometimes, they are included in one category, described as *personality*.
- *Work Experience*. This helps in understanding students in relation to their personality and environment, and also provides information of value for instruction and guidance.

Using the Evaluation. Teaching personnel should understand that the purpose of measurement is to adjust instruction and teaching to the learning abilities of students. Using test scores for grouping, grading, and passing is less important than using them to make changes in instructional methods.

It is also important to remember that a test is merely an

indicator or an aid to help the teacher work better with the student. It is not a goal in itself, since one measurement should certainly never be used by itself as a final appraisal or evaluation of progress or ability.

Student attitudes toward testing are important. When test results are interpreted, always consider information such as the student's home background, his health, his ability, etc. Do not use test results solely to compare students and do not scold a student for doing poorly on a test.

Unless the student is told about how he did on a test and given an indication of how the testing is related to his purposes, he can make no sense of the testing procedure. The teacher's aide can help explain the reason for a test to the student.

TECHNIQUES OF EVALUATION

In preparing a program of evaluating pupil growth and development, different methods can and should be used. Here are brief discussions of some of the basic evaluation devices:

The Interview

One of the most widely used measurement devices is the *interview*. Almost everyone is interviewed or interviews others during the course of his life. For example, information interviews occur everytime a teacher aide talks to a student. Formal interviews differ from informal interviews in that they are usually well structured and have a specific purpose in mind. An aide may interview students to see who would like to take a special course during the summer. This would be a formal interview. Interviews differ from tests as the interviewer may adjust his questions to the answers he hears and thereby probe and explore additional areas.

Although interviews are thus more *flexible* than standard tests, they are also more *subjective*. The interviewer's prejudices and biases are more likely to operate freely in an interviewing situation. However, when properly planned and conducted, interviews can be of value. The interviewee has a chance to impart information to the interviewer that would be difficult if not impossible to do on a test. Teachers' aides should gain as much experience as possible in interviewing techniques.

Questionnaire

Certainly a practical way to gain information about a person is to ask the person a question or series of questions. When

a teacher or aide prepares a written list of such questions, he is preparing a *questionnaire*. The questions making up questionnaires may be of virtually any kind or they may deal with any subject the teacher and aide want to explore. Questionnaires can be mailed to people for educational research purposes; however, the teacher's aide will usually distribute questionnaires only to students in his class or school.

The aide should be aware of some of the more common hazards in using questionnaires. Students will sometimes make careless errors, forget information, or purposely distort their answers. Great care is required in interpreting the results of questionnaires.

Analysis of Hobbies and Out-of-school Activities

Another technique for student evaluation is to analyze the interests and extracurricular activities of the students. Is the pupil's growth and development realistically related to his educational program and goals?

Interest Tests

Many evaluative devices involve reports that the pupil fills in himself (*self-reports*) or reports by others. Some common vocational interest inventories include the *Strong Vocational Interest Blank (VIB) for Men* and *Kuder Preference Record - Vocational*. These inventories help to determine the relationship between the expressed interests of the student with the interests of many people in different occupational groups.

Personality inventories and attitude scales are additional tests that can be used to help the teacher and aide evaluate individual pupils. Evaluating such tests, or *scales* as they are sometimes called, requires considerable judgment. Sometimes these tests may be of value to the teacher or counselor in suggesting *leads* for further attention.

The Commercial Test vs. the Teacher's Own Test. Whose test should be used, one developed by the teacher or one developed by a testing company? For some purposes, a teacher's own test will be best; in other cases, standardized commercially published tests are best. This decision must be made by the teacher, giving consideration to the types of students in the class.

Interpreting Scores or Results of Evaluations. When evaluating tests results, the teacher or aide should:

- Analyze the individual pupil's capacities, knowledge, past experience, interests, and needs.

- Analyze the pupil's goals, and help and encourage him to revise his goals either upward or downward in accordance with his capabilities.
- Harmonize the educational process with the pupil's capabilities and goals.
- Evaluate the pupil's progress in terms of his capabilities and goals.
- Reconsider with the pupil the revised goals in the light of progress he has achieved and strive to correct weaknesses that would interfere with his attaining reasonable goals.

Some of these factors can be measured with rather precise methods and instruments. Others require careful judgment based on effective observations of the pupil and his work.

INSTRUMENTS OF EVALUATION

Teacher aides must become familiar with some of the instruments of evaluation and the standards by which they are established. Often the aide will be required to learn how to construct individual and class educational profiles to show development over a period of years, and to evaluate the adequacy of test batteries, testing programs, norms, scores, and reporting. In addition, the aide may need to know the relative value of so-called intelligence tests, different types of school marks, achievement tests, and so-called *prognostic* tests, used to predict pupil achievement in a given field.

Defining Areas of Measurement

- *Measures of Intelligence*. Perhaps the most important factor for success in school work is the ability to think abstractly - that is, to understand and manipulate abstract symbols, such as mathematical symbols, word meanings, and verbal relationships.
- *Measures of Achievement*. These are used to appraise a student's educational growth and development, and what he has learned in school or other situations where learning and teaching are conducted. Scores are also excellent bases for predicting future educational success in the areas measured by the tests.

Selecting Measurement Instruments

A measurement instrument - that is, a test - should be judged on these points:

- *Validity* - Does the test measure what it should? *A valid test is one that measures what it says it is measuring.* Test validity should not be confused with test reliability.
- *Reliability* - Does the test yield similar results when used with similar groups of pupils? *Test reliability refers to the accuracy or consistency of the test.* If a student retakes the same test, the more alike the two scores are, the more consistent or reliable the test.
- *Administrability* - Do the administrator and pupils find the instructions easy to follow? Is the test easily scored?
- *Interpretability* - Are the scores easy to interpret and understand?

Basic Standardized Measurement Instruments

Some of the more common measuring instruments (or tests) include:

- *Measures of Achievement.*

  Sequential Tests of Educational Progress (STEP).

  SRA Achievement Series.

  Iowa Tests of Educational Development.

  United States Armed Forces Institute (USAFI) Tests.

- *Reading Tests (diagnostic).*

  Gates Reading Diagnostic Tests.

  Durrell-Sullivan Reading Capacity and Achievement Tests.

  SRA Reading Record.

  Stroud-Hieronymus Primary Reading Profiles.

- *Measures of Intelligence (individual tests).* These intelligence tests are administered by school psychologists or pupil personnel workers:

  Revised Stanford-Binet Tests of Intelligence.

  Wechsler Intelligence Scale for Children (WISC).

  Wechsler Adult Intelligence Scale (WAIS).

  Wechsler-Bellevue Intelligence Scale (adolescents).

- *Measures of Intelligence (group tests)*

  California Test of Mental Maturity.

  Lorge-Thorndike Intelligence Tests.

School and College Abilities Test.

- *Interest Inventories*

  Kuder Preference Record: Personal and Vocational.

  Brainard Occupational Preference Inventory.

  Thurstone's Vocational Interest Schedule.

  Strong's Vocational Interest Schedule.

- *Rating Scales (for appraising pupil adjustment)*

  Haggerty-Olston-Wickman Behavior Rating Schedule.

  Vineland Social Maturity Scale.

  American Council on Education Personality Report.

Teacher's aides should become familiar with the names and uses of the test materials above. A comprehensive list of tests used by educators and psychologists can be found in *The Seventh Mental Measurements Yearbook*. Published in two volumes, these books can be used as a valuable reference to the teacher and aide. They provide the reader with brief summaries of the tests, and critical reviews of their effectiveness. Almost every major test used in America today is described in these two volumes.

TESTING PROCEDURES

Teachers' aides, counselor aides, and school administrative aides should become familiar with the basic techniques administering a test or battery of tests. They need to learn how to help the teacher during test administration and scoring, and to gain an understanding of the nature and adequacy of norms and scores.

General Techniques

- *Avoiding Distractions*. The door of the classroom, or testing room, should have a sign warning visitors to keep out during testing. The aide should be sure that noises from the street or from other classrooms are not distracting. Students taking the test should be told whether they are to disregard school bells and continue working past the regular class period.

- *Distributing Tests to Examiners*. If students are being tested in more than one classroom, the tests should not be distributed to examiners before the day of the examination. Packages for each classroom should be made up with the

proper number of tests, answer sheets, special pencils, and other materials in advance, and distributed on the day of the test.

- *Sticking to Instructions.* On standardized tests (those prepared by testing companies) it is absolutely necessary to strictly follow directions in the test manual about answering pupils' questions after a test has started or helping pupils with test items, unfamiliar words, or misunderstood directions. Otherwise, the scores may be uninterpretable, or biased, in the light of the norms or average scores provided with the tests.

- *Timing.* The test administrator should stick carefully to any time limits set for a test, using a watch or clock with a second hand, or a stop watch. If possible, an aide should also check the time throughout the test with his own watch. In timing tests, the examiner should write down the exact hour, minute, and second he gives the signal to start. He should also compute and write down the time for giving the signal to stop.

- *Supervision.* While the students are working on the test, examiners and aides should move about the room as quietly as possible to make sure that everyone puts his answers down properly, and is working on the right part of the test. Watching a student over his shoulder or moving quickly about the room may distract students from their work.

- *Making Notations.* After the examiner has collected the testing materials, he should take note of unusual events in the testing - whether anyone had to leave the room, or showed marked anxiety, or whether there were disruptions, such as a fire drill. Such notes should be taken into account in interpreting the scores. In standardized tests, the examiner should be especially careful to note any discrepancies between the conditions, directions, or time limits under which the test was given, and those listed in the instructions in the test material.

- *Security of Examinations.* Whenever standardized tests are used, provision should be made for their security. Many test publishers include instructions such as the following on the packages of tests, which are sealed when they are shipped:

  "Keep these tests locked up and out of sight of examinees both before the examination and after. Remember that you may wish to give the same test again, or some other teacher may wish to give it, and the result of later testings may be invalidated if stray copies of the test have fallen into the hands of students."

Administering Tests

The following guidelines should be followed by the educational aide in administering tests:

- *Tests are merely attempts to sample what has been learned.*
- Students should know some days in advance that they are to take a standardized test in a particular area of work and they should be informed of the purposes and general form of the test, but they should not be told of its specific content.
- Students should have the opportunity to take practice tests to familiarize themselves with the mechanics of a standardized test before the actual test begins. This applies, however, only to objective test questions and the procedures for marking the answer sheets.
- It is sometimes helpful to pass around a sample, well-marked answer sheet before a test begins, and to mention that pupils may get a lower score if they do not mark the answer sheet properly.
- Following an examination, it is a good idea to pass out the corrected answer sheets and test booklets to a class so they can discuss the items and interpret the results. This practice calls the attention of the class to any group weaknesses in learning, and may suggest a need for reteaching and relearning.
- Teaching for a test is a mistake. The instructor may impress his peers with the high scores his class gets, but he is doing his students a bad turn - the teacher is, in fact, saying that he feels personally insecure and threatened by the test. *The purpose of a test is not to judge the teacher's competence as a teacher.*
- Whenever possible, the students should be tested individually, rather than in groups. In this way the examiner can be aware of nonverbal signs from the student. By carefully watching lip movements, facial expressions, and signs of nervousness, the teacher may learn more about the student than the results of a test can show.

TEST SCORING

The educational aide must become familiar with scoring devices. In addition to helping the teacher as a monitor during the tests, he should be able to use scoring devices in marking stardardized tests.

Order of Scoring

With essay tests, it is often a good idea to have one person

score all tests on the first question, then all on the second, and so on. In this way a fair comparison of the whole class can be made on each question. If the answers to objective tests are written directly in the test booklets instead of on separate answer sheets, the scorer can score a given page in all booklets first, then the next page, and so on, rather than scoring all of one booklet before going on to the next. If so many booklets must be scored that several aides are needed, each person can specialize on a given page or group of pages of the booklet, but should score only one page in all booklets at a time.

Rescoring

If there are many booklets to be scored, it is always worthwhile, provided sufficient help is available, to go over the tests again to eliminate errors that otherwise are almost inevitable in a clerical task such as this. If complete rescoring is not feasible, every fifth or tenth booklet should be recored to get an idea of the frequency and magnitude of scoring errors.

Scoring Devices

Before the aide can begin scoring, he will usually need scoring keys or stencils. Standardized tests have scoring keys, stencils, or other devices that permit rapid and accurate scoring. These keys are of five major types:

- *Strip keys* are used with tests that have the answer spaces along one side of the page in the test booklet. The strip key contains the correct responses in a vertical column on a narrow strip of paper that is placed next to the column of answers in the test booklet.
- *Window stencils* are used when the answer spaces are scattered over the page of the test booklet rather than placed in a single column. The stencils are usually made of heavy paper or plastic and have holes cut in them. When the scorer places the stencil over the page of the test booklet, the correct answer spaces show through the holes. The scorer then counts the number of times the student has filled in the correct answer space, thus obtaining the pupil's score for that page of the test. Frequently, heavy black lines on the stencil connect the holes to guide the scorer's eyes.
- *Carbon* answer sheets are used with multiple-choice tests. On this type, the student answers each question by placing an X in one of a row of small squares. The X is transferred by means of a thin coating of carbon on the reverse side of

the answer sheet onto another sheet that contains only the squares for the correct answers. If the pupil writes his X in the correct square, it will show in the square on the second sheet. The teacher scores the tests simply by counting the number of X's in the small squares on the second sheet.

- *Pinprick* answer sheets are quite similar to the carbon answer sheets. The pupil punches holes in the answer sheet, using a large-headed pin or a stylus. The teacher scores his answers by counting the number of holes that appear within the squares on the reverse side of the answer sheet.

- *Machine-scoring stencils* are used on tests with a separate answer sheet. The stencil is placed over the answer sheets in much the same manner as that described for the window stencils. This procedure is more economical and efficient than the carbon method. Scoring the carbon-type answer sheet requires counting the marks inside circles or squares on the back of the answer sheet, and disregarding the other marks. The machine-scoring stencil requires only counting the marks showing through the holes in the stencils.

- *Machine-scoring devices* are used for large-scale testing programs. The pupil records his answers with a special soft pencil. Marks made by this pencil conduct electricity. The answer sheet is scored by putting it in the machine, pressing a lever to bring the sheet against contact units inside the machine, and reading the score registered by a needle on a meter. Such machines often provide the most accurate and least troublesome means of scoring objective tests.

Differences Between Test Scores and Marks

In addition to becoming knowledgeable about scoring devices, the educational aide should know what scores mean. A raw score on a test means very little. Even if the teacher changes raw scores into percentile ranks, grade placement scores, or various norms, he is merely comparing the performance of one pupil with that of others.

Test scores are only indexes of measurement, and measurement in itself has no particular meaning. Marks or grades, on the other hand, are indexes of *evaluation;* they involve relating the raw score to overall objectives, goals, or standards.

The final section in this unit on testing and evaluation will discuss the meaning of grades and different ways of evaluating student performance.

GRADING SYSTEMS

All educational aides should be able to discuss and use different grading systems. In order to do this, they should be familiar with various systems of evaluating performance by giving grades.

It is important to note that *the major shortcoming of grades or marks is that they are not precisely defined.* The same marks often mean different things to different teachers - even in the same school system. In every school system, it is important that everyone understands what each mark means, as defined further on in this section.

Marking Systems

Reasons for Marking Systems. The educational aide should become familiar with the purposes for marking systems:

- They give information to parents on the child's status and progress in school.
- Grades motivate the students, (and often reflect his motivation).
- They help guide.
- Grades aid the student in planning further education and a career.
- Grades are used in reports and recommendations to future employers, or schools.
- Grades provide data for curriculum studies.

Kinds of Marking Systems.

- *Percentage System.* One of the most common marking systems in public schools is the 100-point scale of percentage: All grades of 70 or higher indicate satisfactory or *passing* work. Marks lower than 70 indicate *failure.* In a typical classroom, pupils receive grades like 81, 84, 96, or 64. The measurement instruments and techniques now available cannot produce the exact results that such marks appear to indicate.
- *Two Category System.* Some educators suggest using just two categories of grading, such as pass or fail (P-F), satisfactory or unsatisfactory (S-U), or plus or minus (+ or -). This system's advantage (many feel, disadvantage) is that it seems to imply that all students who receive a *pass* grade are alike in their abilities or achievement, thereby reducing competition. This system has gained some acceptance, and, where it has been used, some teachers have added the

categories P+, P-, F+, and F-, so that they are actually using a variation of a point system.

- *Five-Point System.* The other marking system most frequently used is based on five *points*, with four *marks* indicating passing or satisfactory work and one mark indicating failing or unsatisfactory work. These points are usually given in letter grades from high to low (A, B, C, D, and F), or numbers (1, 2, 3, 4, and 5, or in reverse order). Although some teachers use only the five categories, others use plus and minus signs to indicate performance slightly above or below a given mark.

Definition of Letter Grades

The following definitions of grades are helpful, but they are not really precise, because they do not state exactly what the goals are against which the student's achievement is measured:

- *A - Excellent.* This student is outstanding. He has achieved all the major and minor goals of the class. His level of achievement is considerably above the minimum required for doing more advanced work in the subject under consideration.
- *B - Highly Satisfactory.* The work of this student is generally better than average. He has achieved all the major goals and many of the minor goals of the class. His level is somewhat above the minimum required for doing advanced work in the same field.
- *C - Satisfactory.* This student's work is acceptable, but not outstanding. He has achieved the major goals, but not the minor ones. His level of achievement barely meets the minimum required for more advanced work in the same field, but he has no major handicaps to overcome.
- *D - Poor.* The work of this student is noticeably weak. He has achieved only a few of the major goals of the class. His level of achievement is so limited that he is not prepared to work on a more advanced level in the same field without considerable remedial work and individual assistance.
- *F - Unsatisfactory.* This student does not meet the minimum requirements of the class. He has achieved none of the major goals. He has failed to accomplish the minimum essential for continued progress in the subject.

Grading on the Curve

In this marking system, the teacher assigns grades according to the range of test scores in the class. This means that the

large group of students who receive scores in the middle of the range will get the average mark for the class. The relatively few pupils at the extremes of the range get the top and bottom marks, respectively, and the pupils between the middle and extreme groups get the above-average and below-average grades. This is *norm-referenced* grading.

Norm- and Criterion-Referenced Grading

There is actually no difference between *norm-referenced* and *criterion-referenced* tests. It is the *evaluation* method of the two tests that differs.

Assigning a grade based on the accomplishment of specific objectives or *criteria* (singular - *criterion*) is fundamentally different than grading on the curve. Criterion-referenced measures are those which are used to determine a student's status with respect to some criterion, or performance standard. With criterion-referenced measurement, the teacher lists the specific criteria that must be accomplished to obtain an "A," the specific criteria that must be met to obtain a "B," etc.

If a teacher grades on a curve there are usually a few "A's" and "F's," some "B's" amd "D's," and the average students receive "C." However, if a teacher grades according to criterion-referenced measures, it is entirely possible that the whole class could get "A's" if they all accomplished the goals and objectives of the course. In actual practice this does not often happen, but at least the student is only competing against himself in terms of accomplishing the stated criteria, and is not directly compared to others in his class on a curve.

In general, it can be said that *norm-reference tests are used to compare or select a student in comparison with others in a similar group.*

Criterion-referenced tests are usually used to make decisions about individuals or the effectiveness of educational programs. Selectivity is not a usual factor with criterion-reference tests.

STUDENT LEARNING ACTIVITIES

- Discuss in small groups questions such as these:
  1. What is to be evaluated?
  2. What are the purposes of evaluation?
  3. What can we use for evaluating purposes?
  4. Can we do it ourselves?
  5. What does the term *scorer* mean?
- Compare methods of measurement in arithmetic with measurements in the social studies, sciences, and art. Discuss the important similarities and differences.

- Debate the following statement - *The educational aide should have as much responsibility as the teacher or counselor in evaluating students.*
- View and discuss films on different aspects of testing and evaluation, for example, *Somebody's Cheating* and *Examinations.*
- Prepare a notebook containing an outline of at least twelve of the more common standardized tests of achievement, reading (diagnostic), intelligence, and vocational interest. Include a brief description of the purpose of each test.
- Compare and discuss the merits of several group intelligence tests designed for the same grade level.
- Look at a so-called diagnostic test. How does it differ from an achievement test? What makes it diagnostic?
- Set up a plan with the help of your teacher for organizing a testing program in a school.
- As a class project, make a study of a standardized achievement test for a given grade level or area of instruction. Make up an evaluation sheet with three columns of responses for each question and rate it according to the three criteria below, placing check marks in Columns 1 and 2 for affirmative responses, zeros for negative responses. In Column 3 put a number to indicate the value of your response:

  Column 1: Are we teaching the knowledge, skill, and thinking processes required to answer this item?

  Column 2: Should the average pupil in my class be able to answer this item correctly?

  Column 3: How important are the skills, knowledge, and mental processes required to answer this item correctly? (Mark 4 for very high, 3 for high, 2 for low, and 1 for very low.) Add all values on the test and find the average importance value of the test. Compare different tests by this procedure.
- Discuss why a pupil's merit should not be judged solely on the basis of his scores on standardized achievement tests.
- Give reasons for and against informing students whether a forthcoming test is to be of the short answer or the essay type.
- Discuss how you would deal with a parent who believes that *the schools are doing too much testing and not enough teaching*, or that *teachers ought to be doing what they are being paid for doing.*

  Examine your own experience for instances when you think your learning was evaluated on a superficial or otherwise inadequate basis. Discuss how improved evaluation might have affected your education.

- Write a short essay on the merits of *norm-referenced* grading and *criterion-referenced* grading. State when you would use each grading evaluation method, and why?

TEACHER MANAGEMENT ACTIVITIES

- Divide the class into small groups and have them discuss questions such as:

  1. What is to be evaluated?
  2. What are the purposes of evaluations?
  3. What can we use for evaluating purposes?
  4. Can we evaluate it ourselves?
  5. What does the term *scorer* mean?

- Compare different methods of measurement in the social studies, sciences, and art, with discussion on the important similarities and differences.

- Discuss the responsibilities of a primary teacher in measurement and evaluation.

- Allow the class to debate statements such as: *The educational aide should have as much responsibility as the teacher or counselor in evaluating students.*

- Show films on testing and evaluation, as *Somebody's Cheating* and *Examinations*. Encourage class discussion of important points afterwards.

- Have the students prepare notebooks containing brief descriptions of at least 12 of the more common standardized tests. The notebook should include samples of various instruments, achievement, reading (diagnostic), intelligence, and vocational interest tests.

- Have the class compare the merits of each test of several group intelligence tests designed for the same grade level.

- Help your students set up a plan for organizing a testing program in a school. An example of a problem to work on would be: Assume that you have all grades from kindergarten through high school. The enrollment of the school is approximately 800 pupils - about 70 percent elementary and 30 percent in high school. The school has not used a systematic testing program before. Assume that you have a budget of $500 for the first year.

  As its director, how would you decide on the purposes of the program?

  What instruments would you use?

  How would you go about getting the program planned, installed, and administered?

  What would you do with the test results?

- Assign a class project on evaluating a standardized achievement test for a given grade level or area of instruction.

- Encourage discussion on how students feel their own learning has been affected by teacher grading and evaluation in the past.
- Assign essays on the merits of *norm-referenced* grading and *criterion-referenced* grading. Be sure that the students include a *rationale* for using each method.

RESOURCES

A Programmed Guide: Fundamentals of Measurement and Evaluation, J. T. Flynn, Van Nostrand-Reinhold Co., 1969.

Measurement and Evaluation in the Classroom, C. H. Nelson, Macmillan, 1970.

Somebody's Cheating (PTS 2) (Sound Filmstrip, purchase), Harcourt Brace and Jovanovich, Inc., 1969.

The Specification and Measurement of Learning Outcomes, D. A. Payne, Ed., Ginn and Company, 1969.

Examinations (S) (Movie, 16mm reel, rental), Indiana University A-V Center, 1970.

Test Construction: A Programmed Guide, Allyn and Bacon, 1970.

Tips in Taking Tests, National Education Asscciation, 1970.

Tests and Measurement, F. G. Brown, Holt, Rinehart and Winston, 1969.

Educational Measurement, E. F. Lyndquist, Ed., Scott Foresman and Company. 1967.

Standards for Educational and Psychological Tests and Manuals, American Psychological Association, 1966.

Making the Classroom Test: A Guide for Teachers, Educational Testing Service, 1961.

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Criterion - Referenced Measurement, W. James Popham, Ed., by Educational Technology Publications, 1971.

The Seventh Mental Measurements Yearbook, Volume I, Oscar Krisen Buros, The Gryphon Press, 1972.

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Appendix A

RESOURCE SUPPLIERS

Appendix A

RESOURCE SUPPLIERS

This appendix is a listing of suppliers of resources itemized at the end of each unit of the individual sections.

Addison-Wesley Publishing Co., Inc.
Reading, Massachusetts 01867

Allyn & Bacon, Inc.
Rockleigh, New Jersey 07674

American Library Association
50 East Huron Street
Chicago, Illinois 60611

American Psychological Association
1200 17th Street, N.W.
Washington, D.C. 20036

Association Press
291 Broadway
New York, New York 10007

Behavioral Research Laboratory
Box 577
Palo Alto, California 94302

Bobbs-Merrill Company, Inc.
Subsidiary, Howard W. Sams & Co.
4300 West 62nd Street
Indianapolis, Indiana 46268

Burgess Publishing Company
426 South Sixth Street
Minneapolis, Minnesota 55415

Carousel Films, Inc.
1501 Broadway
New York, New York 10036

CENCO Educational Aids
2600 S. Kostner Avenue
Chicago, Illinois 60623

Center for Applied Research in Education
70 Fifth Avenue
New York, New York 10011

Chandler Publishing Company
124 Spear Street
San Francisco, California 94105

Churchill Films
6671 Sunset Blvd.
Los Angeles, California 90028

Classroom World Productions
516 West 34th Street
New York, New York 10001

College Entrance Examination Board
475 Riverside Drive
New York, New York 10027
Publications Order Office
Box 592
Princeton, New Jersey 08540

Consulting Psychologists Press
577 College Avenue
Palo Alto, California 94306

Coronet Films
65 E. South Water Street
Chicago, Illinois 60601

Creative Visuals
Box 1911
Big Spring, Texas 79720

Daedalus Periodical
American Academy of Arts and Sciences
7 Linden Street
Cambridge, Massachusetts 02114

Educational Activities, Inc.
P. O. Box 392
Freeport, L. I., New York 11520
or, 4067 Transport Street
Palo Alto, California 94303

Educational Facilities Laboratory
477 Madison Avenue
New York, New York 10022

Educational Technology Publications, Inc.
140 Sylvan Avenue
Englewood Cliffs, New Jersey 07632

Educational Testing Service
Princeton, New Jersey 08540

Encyclopaedia Britannica Educational Corporation
425 North Michigan Avenue
Chicago, Illinois 60611

Eye Gate House, Inc.
146-01 Archer Avenue
Jamaica, New York 11435

Fawcett World Library
1 Astor Plaza
New York, New York 10036

Fearon Publishers
2165 Park Boulevard
Palo Alto, California 94306

Filmstrip House, Inc.
432 Park Avenue South
New York, New York 10016

Follett Educational Corporation
1010 West Washington Boulevard
Chicago, Illinois 60607

Franklin Watts, Inc.
575 Lexington Avenue
New York, New York 10022
A Division of Grolier, Inc.

W. H. Freeman and Company
660 Market Street
San Francisco, California 94104

The Free Press
The Macmillan Company
866 Third Avenue
New York, New York 10026

Ginn and Company
35 Mobile Drive
Toronto 16, Ontario, Canada

The Gryphon Press
220 Montgomery Street
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Appendix B

SUGGESTED EVALUATION QUESTIONS FOR PRE- AND POST-TESTS

Introduction

These tests are keyed to the Educational Services guide of the Public Service Occupations curriculum.

The Educational Services guide includes the following units:

Unit 1 — Human Growth and Development

Unit 2 — How People Learn

Unit 3 — The Disadvantaged Student

Unit 4 — Instructional Methods

Unit 5 — Basic Skills in the Language Arts

Unit 6 — Educational Techniques and Materials

Unit 7 — Testing and Evaluation

These tests were developed to help teachers:

(1) measure student learning gain.
(2) determine if the instructional objectives have been met.

Test Contents

Any evaluation of student learning should adhere closely to the intended outcomes expressed in the written objectives. Therefore, each test is based on the specific instructional objectives found in its corresponding unit in the Orientation guide. Every item of each test is directly associated with one of the objectives found in the guide for that unit.

These tests are structured to help determine whether the student has become competent or not in each unit. The items for each test relate only to the instructional objectives found at the beginning of that unit in the guide. No test items refer to material found in previous or later units. Consequently, each unit in the teacher's guide and its corresponding test can be used independently.

The evaluative approach used in these tests is not designed to measure the relative standing of each student to an actual or hypothetical population. Rather, it is designed to report a student's performance solely in terms of objectives mastered or not mastered. Each student can reach or exceed the minimum performance standard or criterion. Hence, this testing is called criterion referenced testing.

Directions

The tests have been prepared as master copies which may be duplicated for student distribution.

There is a separate test for each unit of instruction in the curriculum guide. For example, test number one can be used as a pretest and a post-test with the content in Educational Services Unit 1 — Human Growth and Development.

Because each class is unique, instructors may add or delete any test items desired.

These tests have been given under nearly every conceivable condition, formal group testing, informal individual sessions, and "take home" tests. In so far as can be determined, satisfactory results were obtained under every condition.

In response to the demand for a system that is easy to use, a convenient answer key for each test has been included in this folder.

The tests provide an objective method for determining student learning gain, while freeing teachers to use valuable time for instruction.

Validity

The validity of any test must be determined in reference to the particular use for which the test is being considered. As these tests are essentially measures of student achievement, they must have content validity. Content validity involves the systematic examination of the test content to insure that it covers a representative sample of the behavior domain to be measured. By employing questions that directly relate to the instructional objectives in each unit, content validity is insured.

An experimental edition of this test was field tested in twelve schools, which were selected on the basis of size of school and community. Over 1,000 secondary school students were involved in the validation testing. Socio-economic groups taking the test ranged from the disadvantaged to upper middle-class. The schools were also selected to gain a student population from urban, suburban, and rural areas. In each of the schools, the teacher first gave the students a pretest before the content was introduced. The same testing instrument was used as a post-test. The objectives were to measure student learning which took place as a result of studying the material in the instructional unit, and to establish criterion referenced tests for use by schools throughout the country. For this purpose, a percentage passing of 70 percent or above on the post-test was considered to be an acceptable criterion mastery for that unit. No norms were established for these tests. It is suggested that each student be able to successfully pass 70 percent of the questions for each instructional unit that he is tested on. During this field test, suggestions for improving these tests were also made. The criterion referenced tests in this booklet are based on the pretest and post-test material used in this validation study.

Other Means of Evaluation

It should be remembered that an instructor can use a wide assortment of test situations to evaluate students.

In assessing a student's ability to work with children, an occasional visit to the classroom where the student is working may reveal the strengths and weaknesses of the student.

Pupils may be evaluated on their ability to prepare bulletin boards and visual aids to enhance a lesson. Instructors may also rate a student's ability to use auditory and audiovisual aids effectively in the presentation of a lesson.

Having students teach from lesson plans that they have prepared may help an instructor judge aptitude for teaching.

When determining the effectiveness of students in working with disadvantaged children, the instructor may wish to simulate situations with disadvantaged students and rate each student accordingly.

These methods may be used to help a teacher determine if a student has an aptitude for the educational field.

Acknowledgements

The Public Service Occupations tests were developed and field tested in twelve locations. While many people were involved in this project, the staff is particularly indebted to the following people:

Lillian Avery,	Test Research Center Los Angeles, CA
Victor Backstrom,	Long Beach Unified School District Long Beach, CA
Dr. William E. Burns,	State University of New York Buffalo, New York
William Crane,	San Diego Unified School District San Diego, CA
Thomas Franklin,	San Diego Unified School District San Diego, CA
Gilbert Garcia,	Sacramento City Unified School District Sacramento, CA
Lt. Charles Kane,	San Leandro Police Department San Leandro, CA
Dr. Nellie M. Love,	Sweet Home Central School District Amherst, New York
James B. Mayo,	Fremont Unified School District Fremont, CA
Myron Nadolski,	Grant Joint Union School District Sacramento, CA
Nadine L. Reed	San Diego Unified School District San Diego, CA
James J. Reilley, S.J.,	Canisius High School Buffalo, New York
Rosalia Salinas,	San Diego Unified School District San Diego, CA
Paul E. Sugg,	Williamsville Central Schools Williamsville, New York
Tom Schrodi,	Orange Unified School District Orange, CA
Thea Stitum,	Sacramento City Unified School District Sacramento, CA

Project Staff

Patrick J. Weagraff, Ed. D., Project Director

James J. Lynn, Curriculum Specialist

Constance F. Gipson
Assistant Curriculum Specialist

Harold M. Blue, Senior Editor

Lillian Deger, Typist

Miriam Dong, Typist

Preparing for Public Service Occupations

Evaluation Questions

1

Unit 1 Human Growth and Development

1. Behavior can be viewed as a _____ activity.
2. _____ development includes the use of eyes and ears to find out what the environment is like.
3. Learning to get along with others is a _____ task.
4. A person who cannot cope may become _____ or _____.
5. Large muscles develop first in a child's _____ development.
6. Children develop _____ when they learn to think on a concrete level.
7. Children who believe that they are worthy human beings have a positive _____.
8. When children learn to love and to trust, they are gaining in _____ maturity.
9. Physical growth is fastest in _____.
10. _____ is a time when one searches for one's identity.
11. Individuals are _____ when they are ready to take their place as functioning members of society

Possible Answers

adolescence	emotional	intellectually	physical	self-image	social
coping	infancy	mature	repressed	sensory	withdrawn

Answer Key

1. coping
2. sensory
3. social
4. withdrawn, repressed
5. physical
6. intellectually
7. self-image
8. emotional
9. infancy
10. adolescence
11. mature

Place the letter before each of the following characteristics in one of the boxes below. Although there are individual differences in stages of development, place each characteristic in the age group where it is most likely to be found. No letter can be left out or used more than once.

A. Seeks love and affection from family group
B. Can reason well about things that cannot be seen
C. Recognizes own strengths and weaknesses
D. Becoming aware of surrounding environment
E. Is mature at one moment, immature at another moment
F. Becoming attracted to the opposite sex
G. Large muscles are developing
H. Can form good relationships with many people
I. Can sort items into categories
J. Gaining in fine muscle coordination
K. Reacts to loud noises, loss of support, and loneliness
L. Glandular and sexual changes occurring
M. Is identifying the role one's sexual group usually plays
N. Physical growth completed
O. Has a great need to be accepted by peers
P. Can analyze and evaluate ideas on a higher level

	PHYSICAL	INTELLECTUAL	SOCIAL	EMOTIONAL
0-6 Years Old				
6-12 Years Old				
Adolescence				
Adulthood				

Answer Key

	PHYSICAL	INTELLECTUAL	SOCIAL	EMOTIONAL
0-6 Years Old	G	D	A	K
6-12 Years Old	J	I	M	O
Adolescence	L	B	F	E
Adulthood	N	P	H	C

Preparing for Public Service Occupations

Evaluation Questions

2

Unit 2 How People Learn

1. **When students make ice cream in the classroom, they are learning by:**
   A. Observation ____
   B. Transference ____
   C. Doing ____
   D. Trial and error ____

2. **When students solve different problems by remembering how to solve similar problems, they are learning by:**
   A. Observation ____
   B. Transference ____
   C. Doing ____
   D. Trial-and-error ____

3. **Which is not an effective way to get students to learn by transference?**
   A. Teach each fact separately ____
   B. Stress the underlying principles ____
   C. Stress the relationship of what is being taught to other parts of learning ____
   D. Use leading questions to get students to transfer learning ____

4. **Teaching many similar things at once may lead to:**
   A. Negative transfer ____
   B. Positive transfer ____
   C. Learning by doing ____
   D. None of the above ____

5. **When students stay at some stage of learning for a long time, they have:**
   A. Regressed ____
   B. Reached a plateau ____
   C. Done as well as they could ____
   D. All of the above ____

6. **Which could not be a cause of a learning plateau?**
   A. Emotions ____
   B. Subject matter too hard ____
   C. High motivation ____
   D. Failure of the instructor to give needed assistance ____

7. **An achievement test measures:**
   A. What the student may be able to do ____
   B. What the student may be able to do after training ____
   C. What the student is accomplishing at the present time ____
   D. All of the above ____

8. People learn best if their instructors remember to:

A. Provide breaks _____
B. Teach theory, then allow practice time _____
C. Limit instructional time to 50 hours per week _____
D. All of the above _____

9. When students score lower after training than before training they have:

A. Reached a plateau _____
B. Regressed _____
C. Done as well as they could _____
D. All of the above _____

10. Instructors should allow students to:

A. Criticize ideas _____
B. Disagree with them _____
C. Defend their own ideas _____
D. All of the above _____

11. When teachers measure what students may be able to do, they are measuring:

A. Achievement _____
B. Aptitude _____
C. Ability _____
D. All of the above _____

12. Which statement is correct?

A. Every second grade class in a school should have the same schedule _____
B. It is best to start with practical work, then explain the theory later _____
C. It is best to teach the theory first, then provide practical work _____
D. The more a teacher covers, the more students learn _____

13. If children see others being rewarded for specific behavior, they are apt to:

A. Become hostile toward those receiving the reward _____
B. Imitate those receiving the reward _____
C. Become hostile toward the person giving the reward _____
D. None of the above _____

14. Students learn best if they can:

A. Do what is being taught _____
B. Use the trial-and-error method to see for themselves which works best _____
C. Observe others doing what is being taught _____
D. Transfer what they have learned previously to the new situation _____

Answer Key

1. C	4. A	7. C	10. D	13. B
2. B	5. B	8. D	11. B	14. A
3. A	6. C	9. B	12. C	

Preparing for Public Service Occupations

Evaluation Questions

3

Unit 3 The Disadvantaged Student

Johnny is a nine-year-old boy. He is very dirty and wears old clothes that are too big for him. He is absent much of the time, and is tardy often.

Johnny is very small for his age, and is quite thin. He has been known to steal food from the lunch boxes of other children.

He does not get along well with other children. He is constantly in a fight, and tends to pick on the smaller children on the playground.

Johnny is a very poor student, particularly in reading and arithmetic. As his grammar is poor, he is at the bottom of the class in language.

Johnny's parents feel they are doing a good job with Johnny, and if there is a problem, it is the school's fault.

As Johnny's teacher, what would you do about this situation? Choose the ten best answers from the list below.

A._____Don't let Johnny participate in class

B._____Provide breakfast for Johnny

C._____Spank Johnny when he fights the younger children

D._____Give Johnny love and attention

E._____Write his parents a nasty letter

F._____Assign different children to play with Johnny

G._____Scold Johnny in front of the class

H._____Ignore Johnny

I._____Take clothes that fit Johnny to Johnny's home

J._____Give Johnny treats when he does well

K._____Expel Johnny for three days if he misbehaves again

L._____Explain to Johnny how his behavior is inappropriate

M._____Isolate Johnny from the rest of the class when he misbehaves

N._____Bring a washcloth and have Johnny wash up every morning

O._____Expel Johnny the first time he misbehaves

P._____Invite Johnny's parents to school for a conference

Q._____Give Johnny extra help in reading, math and language

R._____See if Johnny qualifies for free lunch

S._____Let Johnny miss recess if he can't behave

T._____Praise Johnny when he does well

U._____Go to Johnny's home for a conference

Answer Key

D	R
J	T
M	S
P	Q
U	L

Although each child and each situation is unique, the above answers reflect the general philosophy which has been found to be most effective in dealing with disadvantaged children.

Unit 4 Instructional Methods

1. In selecting instructional materials, teacher's aides should consider:
- A. Cost _____
- B. Whether the materials are worthwhile _____
- C. Cost and whether the material is worthwhile _____
- D. None of the above _____

2. In determining worth of material, the instructor should consider if:
- A. The material is on the right level of the students _____
- B. The material is too costly _____
- C. The material is accurate and up-to-date _____
- D. All of the above _____

3. In selecting materials, teacher's aides should:
- A. Decide which method is best suited to what has to be taught _____
- B. Use tapes and videotapes as much as possible _____
- C. Use films as much as possible _____
- D. All of the above _____

4. Which of the following are considered auditory training aids?
- A. Chalkboards and bulletin boards _____
- B. Radios, records, and tape recorders _____
- C. Models and displays _____
- D. All of the above _____

5. Work sheets or information sheets are called:
- A. Software _____
- B. Hardware _____
- C. Auditory training aids _____
- D. None of the above _____

6. Which is a true statement about training aids?
- A. Learning aids appeal to the senses _____
- B. Training aids have not been effectively used in many public education programs _____
- C. Training aids are usually constructed or selected by the instructor _____
- D. All of the above _____

7. Instructors use lesson plans to:
- A. Keep students informed _____
- B. Keep parents informed _____
- C. Guide themselves in preparing a lesson _____
- D. Aid the superintendent _____

8. Every lesson plan should include:

A. Plans for seating pupils _____
B. Plans to aid the students' comfort _____
C. Plans for adequate air in the room _____
D. All of the above _____

9. After instructors have taught a lesson many times, they:

A. Forget to cover the material _____
B. Gain confidence in themselves _____
C. Become self-conscious _____
D. None of the above _____

10. When class discussion leads to another subject, the instructor should:

A. Get the discussion back to the lesson plan as soon as possible _____
B. Let the class keep on discussing what is interesting to them _____
C. Change the lesson plan _____
D. None of the above _____

11. The heading of the lesson plan should include:

A. A tie-in with previous knowledge _____
B. Ways of interesting the class in the subject _____
C. The lesson file number and training aids needed _____
D. All of the above _____

12. The introduction of the lesson plan should include:

A. A summary of the lesson _____
B. The method of presentation _____
C. A way to interest the class in the subject _____
D. The title of the lesson _____

13. The development of the lesson plan should include:

A. The title of the lesson _____
B. Examples to make the material clear _____
C. A way to interest the class _____
D. All of the above _____

14. The summary of a lesson plan should include:

A. Periods for checking student understanding _____
B. Illustrations and devices for making things clear _____
C. A review for all important points and conclusions _____
D. All of the above _____

Answer Key

1. C	4. B	7. C	10. A	13. B
2. D	5. A	8. D	11. C	14. C
3. A	6. D	9. B	12. C	

Preparing for Public Service Occupations

Evaluation Questions

5

Unit 5 Basic Skills in the Language Arts

1. The basic word vocabulary of second grade readers consists of:
- A. First grade words and second grade words _____
- B. Second grade words _____
- C. Second grade words and third grade words _____
- D. First grade words _____

2. Which would be visual skill?
- A. Hearing the differences in words _____
- B. Saying words that rhyme _____
- C. Seeing likenesses and differences in words _____
- D. None of the above _____

3. A comprehension skill would be:
- A. Seeing likenesses in words _____
- B. Telling the meaning of a sentence _____
- C. Hearing rhyming words _____
- D. None of the above _____

4. First grade word recognition skills consist of:
- A. Knowing the names of letters _____
- B. Matching letters _____
- C. Matching capital and small letters _____
- D. All of the above _____

5. Teachers can create a pleasant atmosphere by:
- A. Concentrating on drill _____
- B. Placing pictures of show business people around the room _____
- C. Working on a large chalkboard far from the students _____
- D. All of the above _____

6. When teaching children to read, the teacher should:
- A. Introduce material at a fast rate to avoid boring the children _____
- B. Let each student learn at his own rate _____
- C. Try to keep all children learning at an average rate _____
- D. Introduce all material at a slow rate to avoide upsetting slower children _____

7. Which statement is correct?
- A. Skills should be taught in a series of small steps _____
- B. Skills should be presented in big steps to show the whole picture at once _____
- C. Children learn best when their reading materials are primarily unfamiliar _____
- D. Teachers should spend the same amount of time on each skill with every child _____

8. An auditory skill would be:

A. Hearing the differences in words _____
B. Hearing rhyming words _____
C. Knowing the number of sounds in a word _____
D. All of the above _____

9. Readers should be able to:

A. Draw logical conclusions _____
B. See relationships _____
C. Predict outcomes _____
D. All of the above _____

10. Primary students are more likely to use:

A. Encyclopedias _____
B. Atlases and maps _____
C. Beginning dictionaries _____
D. None of the above _____

11. Fourth, fifth, and sixth grade students are likely to use:

A. Encyclopedias _____
B. Card catalogues _____
C. Atlases and maps _____
D. All of the above _____

12. A reading text book is correct for a student if:

A. The student can read it with no mistakes _____
B. The student makes some mistakes while reading it _____
C. The students makes many mistakes while reading it _____
D. The student must figure out every word _____

13. Comic books can be used to:

A. Teach writing skills _____
B. To add interest in reading _____
C. To increase reading ability _____
D. All of the above _____

14. Primary students should be able to use:

A. Italics _____
B. Parentheses _____
C. Exclamation marks _____
D. None of the above _____

Answer Key

1. A	4. D	7. A	10. C	13. D
2. C	5. B	8. D	11. D	14. C
3. B	6. B	9. D	12. B	

Preparing for Public Service Occupations

Evaluation Questions

6

Unit 6 Educational Techniques and Materials

1. Teachers use instructional materials because:
- A. They save time ____
- B. They create interest ____
- C. They develop understanding ____
- D. All of the above ____

2. Bulletin boards should:
- A. Have little color ____
- B. be very detailed ____
- C. Have legible writing ____
- D. Be hard to handle ____

3. A good bulletin board would not have:
- A. Many major ideas ____
- B. Illustrations ____
- C. Clear captions ____
- D. A headline ____

4. Bulletin board letters can be made by:
- A. Rubber-stamp ____
- B. Stencil ____
- C. Speed-ball pens ____
- D. All of the above ____

5. One of the disadvantages of the opaque projector is that:
- A. The class does not pay attention ____
- B. The opaque material can be projected ____
- C. The room must be darkened ____
- D. It can be used for individual and group instruction ____

6. Which one is an untrue statement about opaque projectors?
- A. The opaque projector is bulkier than most projection equipment ____
- B. The lamp shines light on the stage ____
- C. The lens focuses and enlarges the image on the screen ____
- D. The tray is used to project materials which are not flat ____

7. Which one is an advantage of the overhead projector?
- A. Classroom lights can be left on ____
- B. The cost of prepared materials is low ____
- C. The transparencies can not be used again ____
- D. None of the above ____

8. The sound track is located:

A. On the sound drum _____
B. On the film _____
C. In the amplifier _____
D. In the speaker _____

9. Which part of a film system changes the electrical vibrations into sound vibrations?

A. The exciter lamp _____
B. The amplifier _____
C. The speaker _____
D. The sound drum _____

10. It is necessary to have a film loop above and below the film channel so that:

A. The sound drum can operate _____
B. The film won't break _____
C. The amplifier can enlarge the vibrations _____
D. The film will fit into the sprocket holes _____

11. Which one is a true statement about films?

A. The picture should go through the projector upside down and backward _____
B. The film should come off the reel counter-clockwise _____
C. The film should go through the projector right side up and forward _____
D. None of the above _____

12. In starting a film projector, the teacher's aide should:

A. Start motor, turn on lamp, then thread projector _____
B. Prefocus and position machine, connect power cord, then thread projector _____
C. Prefocus and position machine, turn on amplifier, then thread projector _____
D. Thread projector, turn on amplifier, then prefocus and position machine _____

13. Teachers use tape recorders because:

A. Tape recorders lessen a child's imagination _____
B. It is a good way for children to express themselves _____
C. Children are unable to pick out their own voices _____
D. All of the above _____

14. An advantage of thin magnetic tape over thicker tape is that it:

A. Gives more playing time _____
B. Tends to last longer _____
C. Can be erased more _____
D. All of the above _____

Answer Key

1. D	4. D	7. A	10. B	13. B
2. C	5. C	8. B	11. A	14. A
3. A	6. D	9. C	12. C	

Unit 7 Testing and Evaluation

1. Which is true of norm-referenced grading?
- A. The teacher grades on a curve _____
- B. The students in the middle get average marks _____
- C. A student's work is compared to the other members of the class _____
- D. All of the above _____

2. Which is true of criterion-referenced grading?
- A. The teacher grades on a curve _____
- B. The students try to accomplish a set goal _____
- C. A student's work is compared to the other members of the class _____
- D. None of the above _____

3. Tests that measure comprehension and academic ability are called:
- A. Aptitude tests _____
- B. Interest tests _____
- C. Intelligence tests _____
- D. Achievement tests _____

4. Tests used to predict the outcome of a student's performance after training are called:
- A. Interest tests _____
- B. Aptitude tests _____
- C. Intelligence tests _____
- D. Achievement tests _____

5. Tests that measure what students have learned (after training) are called:
- A. Achievement tests _____
- B. Intelligence tests _____
- C. Aptitude tests _____
- D. Interest tests _____

6. Students' special abilities can be detected by:
- A. Special tests _____
- B. Observation of products made by students _____
- C. Oral interviews _____
- D. All of the above _____

7. In determining the interests of students, instructors can give:
- A. The Strong Vocational Interest Blank _____
- B. The Kuder Preference Record - Vocational _____
- C. The Thurstone's Vocational Interest Schedule _____
- D. All of the above _____

8. When evaluating interest test results, instructors should not:

A. Consider the pupils knowledge interests and needs _____
B. Analyze the pupils' goals _____
C. Focus entirely on the test results _____
D. Relate the educational process to the pupils' capacities and goals _____

9. Good tests should:

A. Measure what they say they are measuring _____
B. Have similar results when used with similar students _____
C. Have instructions that are easy to follow _____
D. All of the above _____

10. The Iowa Test of Educational Development is:

A. An interest test _____
B. An achievement test _____
C. An aptitude test _____
D. None of the above _____

11. One of the tests to diagnose reading ability is:

A. The Durrell-Sullivan Reading Capacity _____
B. California Tests of Mental Maturity _____
C. The Wechsler Intelligence Scale for Children (WISC) _____
D. The Wechsler-Bellevue Intelligence Scale _____

12. Which test is a group test to measure intelligence?

A. The Iowa Test of Educational Development _____
B. California Test of Mental Maturity _____
C. Kuder Preference Record _____
D. Stanford-Benet Tests of Intelligence _____

13. A test for evaluation of a pupil's adjustment would be:

A. The Kuder Preference Record _____
B. The Lorge-Thorndike Intelligence Test _____
C. The Vineland Social Maturity Scale _____
D. None of the above _____

14. Standardized tests can be graded by using:

A. Strip keys _____
B. Window stencils _____
C. Machines _____
D. All of the above _____

Answer Key

1. D	4. B	7. D	10. B	13. C
2. B	5. A	8. C	11. A	14. D
3. C	6. D	9. D	12. B	

Project Staff

Patrick J. Weagraff, Ed. D. ..... Director
James J. Lynn, M.S. ..... Curriculum Specialist
Harold M. Blue ..... Editor
Jean Smith ..... Reproduction Typist
Miriam Dong ..... Reproduction Typist
Lillian Deger ..... Typist
Mary Sullivan ..... Typist

GPO 693-477/275

ACCESSION NUMBER: VT102225

PUBLICATION DATE: JUN75

TITLE: PREPARING FOR PUBLIC SERVICE OCCUPATIONS. LAW ENFORCEMENT SERVICES. CURRICULUM GUIDE.

DESCRIPTOR: *LAW ENFORCEMENT; *CAREER EDUCATION; *PUBLIC SERVICE OCCUPATIONS; *CURRICULUM GUIDES; ENTRY WORKERS; GRADE 11; GRADE 12; ADULT EDUCATION

IDENTIFIER: *POLICE EDUCATION

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 144P.; RELATED DOCUMENTS VT 102 220 THROUGH VT 102 226 IN THIS ISSUE.

ABSTRACT: THIS CURRICULUM GUIDE IS ONE OF A SERIES DEVELOPED AS PART OF THE PUBLIC SERVICE OCCUPATIONS CURRICULUM PROJECT TO ASSIST IN THE IMPLEMENTATION OF CAREER EDUCATION PROGRAMS CONCERNED WITH PUBLIC SERVICE OCCUPATIONS. THE GUIDE CONSISTS OF SIX UNITS, AND CONTAINS THE BASIC INSTRUCTIONAL MATERIAL RECOMMENDED FOR THE AREA OF LAW ENFORCEMENT SERVICES PREPARATION. IT OFFERS SUGGESTIONS FOR COURSE CONTENT, TEACHING MATERIALS, AND INSTRUCTIONAL OBJECTIVES, AS WELL AS TEACHER AND STUDENT ACTIVITIES HELPFUL IN PREPARING INDIVIDUALS FOR ENTRY-LEVEL POSITIONS IN PUBLIC SAFETY OCCUPATIONS. THE SUBJECT MATTER IS ORIENTED TOWARD TEACHERS WITH MINIMAL TRAINING AND/OR EXPERIENCE IN PUBLIC SERVICE EDUCATIONAL PREPARATION. UNIT HEADINGS INCLUDE ORGANIZATION AND OPERATION OF POLICE DEPARTMENTS, BASIC ELEMENTS AND ISSUES IN ADMINISTRATION OF JUSTICE, PREVENTIVE PATROL TECHNIQUES, INVESTIGATIVE TECHNIQUES, TRAFFIC DIRECTION AND CONTROL, AND DELINQUENCY PREVENTION AND CONTROL. APPENDED IS A LIST OF RESOURCE SUPPLIERS AND SUGGESTED EVALUATION QUESTIONS FOR PRETESTS AND POSTTESTS. (AUTHOR/LJ)

CONTRACT NUMBER: OEG-0-71-4780(357)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402. (STOCK NUMBER 017-080-01436-0)

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. VOCATIONAL EDUCATION SECTION.

SPONSORING AGENCY NAME: BUREAU OF OCCUPATIONAL AND ADULT EDUCATION (DHEW/OE), WASHINGTON, D.C. DIV. OF RESEARCH AND DEMONSTRATION.

VT 102 225

Preparing for Public Service Occupations

VT 102 225

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C., 20402

Stock No. 017-080-01436-0

Preparing for Public Service Occupations

Law Enforcement Services

by:

California State Department
of Education
Vocational Education Section
Program Planning Unit
Sacramento, California 95814

in accordance with:

U.S. Office of Education
Bureau of Occupational and
Adult Education
Division of Research and
Demonstration
Curriculum Development Branch
Grant No. OEG-0-71-4780 (357)

June, 1975

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

SPES ANCHORA FIDEI

U.S.A.

This document is one of a series of curriculum guides dealing with the Public Service Occupations career cluster. The titles of all individually available documents in this series appear below:

Exploration of Public Service Occupations
Orientation to Public Service Occupations
Preparing for Public Service Occupations—Common Core
Preparing for Public Service Occupations—Educational Services
Preparing for Public Service Occupations—Law Enforcement Services
Preparing for Public Service Occupations—Social Services
Administering Public Service Occupations—An Implementation Guide

The project presented or reported herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

Developed pursuant to grant No. OEG-0-71-4780
by the California State Department of Education
Vocational-Technical Education Curriculum Laboratory
Sacramento, California
Funded by the U.S. Office of Education under
Part I - Curriculum Development in Vocational and Technical Education
Vocational Education Amendments of 1968,
Public Law 90-576
1975

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FOREWORD

This *Law Enforcement Services Career Education Curriculum Guide* is one of a series developed to assist those involved in implementing career education programs concerned with public service occupations. This Guide consists of six units, and contains the basic instructional material recommended for the area of Law Enforcement Services preparation. It offers suggestions for course content, teaching materials, and instructional objectives, as well as teacher and student activities helpful in preparing individuals for entry-level positions in public safety occupations.

The subject matter is oriented toward teachers with minimal training and/or experience in public service educational preparation. Units are presented in a sequential order; however, each is designed to stand alone as a separate body of knowledge. Primary emphasis is on Law Enforcement occupations preparation; however, other individuals may also want to utilize the information contained in this Guide.

All of the information is "suggested," and should be adapted to meet local conditions and needs.

A wide range of suggestions and approaches to the subject were received and, wherever possible, incorporated into the final document. Since the resulting materials represent many opinions, no approval or endorsement of any institution, organization, agency, or person should be inferred.

This Guide was prepared by the California State Department of Education, Vocational Education Section, Program Planning Unit, which is under the direction of E. David Graf. The major responsibility for the coordination of this Guide belongs to James J. Lynn, Curriculum Specialist, Public Service Occupations Curriculum Project.

Patrick J. Weagraff, Ed.D.
Project Director

ACKNOWLEDGEMENTS

The completion of this career education guide depended upon the assistance, advice, and cooperation of many individuals. The California State Department of Education, Vocational Education Section, Program Planning Unit, wishes to acknowledge in particular the contribution of the following individuals:

Victor A. Rackstrom
Public Service Occupations Teacher
Long Beach, California

Robert P. Breen
Special Consultant
Williamsville, New York

John Bunten, Senior Program Officer
Bureau of Adult and Vocational-Technical Education
San Francisco, California

Dr. William E. Burns
Professor of Education
State University College at Buffalo
Buffalo, New York

Dr. Ronald Detrick
Director of Career Education
San Diego Unified School District
San Diego, California

Dr. Clark Dobson, Associate Secretary
Association for Supervision and Curriculum Development/NEA
Washington, D.C.

Dr. Nevin Frantz
Assistant Professor of Education
University of Georgia
Athens, Georgia

Irvin Gartner
Associate Director
Berkeley Executive Seminar Center
Berkeley, California

Elmer George, Executive Director
Georgia Municipal Association
Atlanta, Georgia

Alfred W. Koch
Curriculum Coordinator
Rawlins Public Schools
Rawlins, Wyoming

Andrew S. Korim
Public Service Specialist
American Association of Junior Colleges
Washington, D.C.

Fred Martinez, Consultant
Education for the Disadvantaged
California State Department of Education
Sacramento, California

James B. Mayo, Coordinator
Fremont-Newark Regional
Occupational Program
Fremont, California

James J. McIlwrath, Consultant
Office of Program Evaluation
State Department of Education
Sacramento, California

Fred Miller, Chief
Public Service Institute
Department of Education
Harrisburg, Pennsylvania

Edward L. Morgan, Chairman
Department of Criminal Justice
State University College at Buffalo
Buffalo, New York

Paul N. Peters, Manager
Career Education Task Force
State Department of Education
Sacramento, California

Marvin I. Sarapin
Special Consultant
Buffalo, New York

Gerald D. Theis
Special Consultant
Buffalo, New York

Mrs. Melba Williams
Georgia Municipal Association
Atlanta, Georgia

Dr. James Wykle
Education Program Specialist
U. S. Office of Education
Washington, D.C.

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Unit 1

ORGANIZATION AND OPERATION OF POLICE DEPARTMENTS

Here are the contents for the introductory unit to the Public Safety Group. We suggest a careful reading of it before you read the text.

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Unit 1

ORGANIZATION AND OPERATION OF POLICE DEPARTMENTS

INSTRUCTIONAL OBJECTIVES

1. Ability to describe the general organizational structure of a typical police department.
2. Ability to understand the general requirements for admission into the police service.
3. Ability to distinguish the various employment categories in the police service and their basic duties.
4. Ability to summarize the mission and primary tasks of selected police units and services.
5. Ability to recognize the relationship between law and order, and individual freedom in police work.
6. Ability to form positive values about general police operations.

CONTENT

INTRODUCTION

The organization of modern-day society for its own protection against crime and the criminal element provides one of the most interesting and fascinating stories of our time. Crime and delinquency are among the major social problems confronting the American people. In addition, the mass production line in the automotive industry and the rapid increase in motor vehicle registration present challenges of major proportions to modern society.

So that the problems involved can begin to be understood, and proper solutions arrived at, a new educational field of police organization and management has evolved. This is the study of the principles of organization and administration of law

enforcement agencies, and applications of these principles to the effective delivery of modern police service. The discussion herein will cover the fundamentals of that new science.

Police problems tend to become complex in proportion to the extent that they are understood. The organization and administration of the police enterprise is a technical undertaking that requires an informed approach if the resources of personnel and equipment are to be used to the best advantage and with the best results.

This unit is primarily concerned with the problems of municipal police service, although the basic principles involved apply equally well to law enforcement administration at the county, state, and federal levels, and to the fields of commercial and industrial security.

EMPLOYMENT LEVELS

Prior to discussion of organization and management, however, it is necessary to understand the various employment levels within the police service. The first task, then, is an identification of the employment levels and their associated responsibilities.

Patrolman.

The *Patrolman* is the first-line officer of the Police Department. He is charged with the general responsibility of enforcing the law and providing services to the public. The patrolman is the most visible member of the Police Department and often the only member with whom citizens may come in contact. Patrolmen may be assigned to such duties as patrol, traffic enforcement, tactical patrol or strike units, canine corps, community relations, clerical, etc.; but are most frequently assigned to uniformed motor patrol.

Detective.

The *Detective* is assigned to a non-uniformed criminal investigation unit. It is not always a specific rank, and a policemen is sometimes assigned to the task. In the event detective is a separate rank, the salary and prestige are slightly above the rank of patrolman and below the rank of Sergeant. The term *Detective*, however, is commonly used to describe anyone assigned to non-uniformed investigation.

Sergeant.

The *Sergeant* is one rank above the patrolman. He is the first

level of supervision. When a Sergeant is assigned specific duties, the identification of the duty usually takes precedence in his title, for example, *Patrol, Detective,* or *Records Sergeant.* Some police departments do not have this rank, and others use it only in specialized areas such as the Detective Bureau.

Desk Lieutenant.

The rank of *Desk Lieutenant* is a position found in some areas of the United States, and usually with duties in communications. A rank above Sergeant, but below the full rank of Lieutenant, the Desk Lieutenant does not usually exercise supervisory or administrative authority, and does not usually participate in the actual enforcement of the law. It should be remembered, however, that all sworn police personnel have the powers of arrest and are charged with the responsibility of enforcement of the law.

Lieutenant.

Sometimes called *Field Lieutenant, Detective Lieutenant, Training Lieutenant,* etc., this rank either replaces Sergeant, where that position does not exist, or is the first administrative rank. The Lieutenant is usually assigned both administrative and supervisory duties, and police at this level may be charged with active enforcement in specialized instances. A Lieutenant is usually in charge of a work shift.

Captain.

The *Captain*, above the level of the Lieutenant, is primarily charged with administrative responsibilities. Although Captains do exercise some supervisory responsibilities, they are seldom involved in the actual enforcement of the law. A Captain is usually in charge of a detail or region, such as a station or precinct.

Inspector.

Inspector is a rank common to the larger Police Departments only. The Inspector is primarily involved with administrative duties, in charge of such police functions as patrol, investigation, records and communications, or training.

Deputy Commissioner.

Also known as *Deputy Chief of Police,* the Deputy Commissioner

is primarily concerned with administrative and policy-making matters. Working directly under the Commissioner or Chief, a single Deputy would have the responsibility of running the Department in the Chief's absence, with general responsibility for personnel. If the police force has more than one Deputy, as many larger Departments do, responsibility may be divided in relation to the various functions.

Commissioner or Chief of Police.

Usually an appointive office, this is the highest rank of the Department. The Chief or Commissioner interacts with the political structure, and deals largely with the Department's budget. He sets policy for the Department and is responsible for all of the Department's activities. The Chief is the final authority in the structure of the Police Department.

Civilian Employees.

As Police Departments are generally organized along semi-military lines, the term *civilian* is usually used to designate personnel who do not have enforcement authority. Employees with enforcement power are usually referred to as *sworn personnel.*

Civilian personnel are normally employed in activities necessary to support the sworn members of the Department in the discharge of their duties. For example: clerical-secretarial, radio dispatchers, and information clerks. Civilians with special expertise may also be employed by a Police Department in such fields as computer technicians, analysts, and programers, or as laboratory scientists in a crime (or *forensic*) laboratory. Civilian employees are normally supervised by sworn members of the Department at a rank level commensurate with the task the civilians perform.

The Police Executive.

At the upper level of management, the leadership role is similar to that of a ship's navigator. The Police Chief-Executive is confronted with the responsibility of making high-level, critical decisions, as opposed to routine decisions. They are decisions that define the ends of the undertaking and shape its essential character. He is also responsible for seeing that the organization accepts and implements these objectives, once they have been established.

One of the major goals of the Police Chief-Executive is the establishment and maintenance of good departmental morale,

and of a true spirit of teamwork and correlation of the different units of the Department into a unified working group. One of the better ways of attaining this goal is the development, by the executive, of incentive systems. Under inspired leadership, good systems of this nature will promote initiative and self-reliance, and generate a far more powerful driving force than could ever be imposed by a *voice of authority* from the top.

POLICE ORGANIZATION

The word organize has been defined as: systematize into a whole, a number of interdependent parts, each of which has a special function or relation with respect to the whole. This definition is basically structural in concept, and has led to preparation of so-called *organization charts*, as shown in Figure 1.

The Organization Chart

Description. The organization chart is simply an arrangement of lines depicting schematically the organizational items of position and function. These arrangements may be simple or complicated, depending upon the size and diversity of the organization.

Usually the lines connecting the various *boxes* show the formal lines of communication, authority, and responsibility, as these were conceived in the organizational design. These lines do not, however, reflect the actual activities of the organization. If, in fact, these lines were strictly enforced, the organization would be unable to function.

Likewise, if an attempt is made to show on the chart all the informal interrelationships of the various departments and personnel, even in the simplest form, the chart becomes almost unreadable. This would probably be a futile attempt, anyway, as relationships of the various activities in a Police Department will be constantly changing with different situations.

The value, then, of the organization chart is highly limited. It provides only a visual basis for the general grouping of activities. Beyond this, however, reliance on the organization chart as a basis for decision-making may be disastrous.

Limitations of the Organization Chart. Organization is only effective insofar as it helps the enterprise determine and achieve its short and long range goals. *Regardless of the geometric numerical sequences, if an organizational pattern does not assist in the achievement of either short or long*

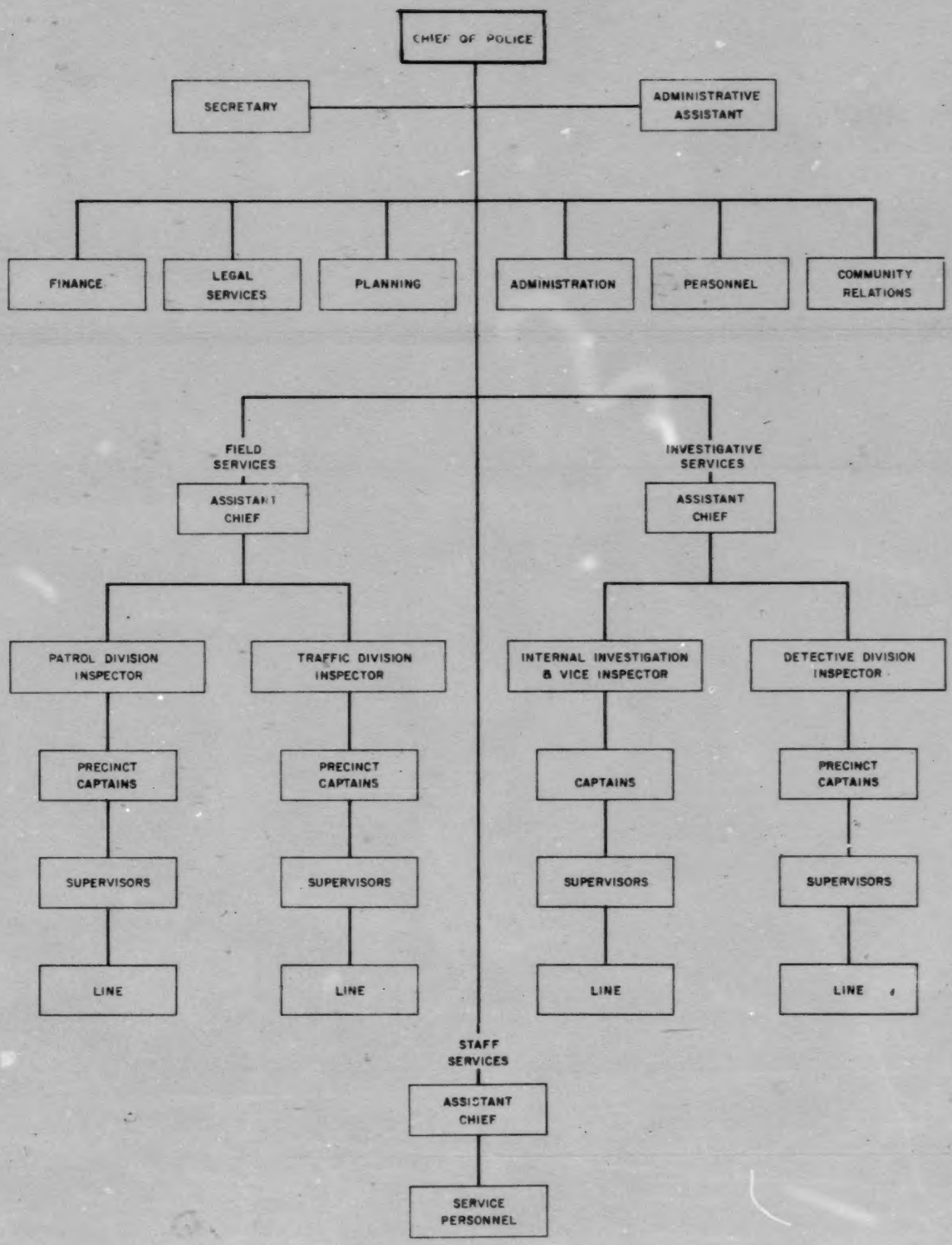

Figure 1. Typical Organization Chart

range goals of the organization, it becomes meaningless. In fact, some instances may well provide an atmosphere in which strict adherence to these organizational lines may prevent the achievement of organizational goals.

Organization of any working group is almost always the result of a series of compromises which generalize many possibilities into a specific situation.

Organization, it must be remembered, is a dynamic and fluid force, and does not exist in a vacuum; it is made up of persons who react and respond to numerous different forces, many of which cannot be really defined or measured. There is thus another limitation to specific organization structure: the characteristics of the individual or individuals involved, at the various levels of employee, supervision, and administration.

"Humanism" in Organizational Structure

Organizational structures should be regarded, therefore, as considerations, which under normal circumstances serve to develop questions that the organizer must answer in the light of the specific situation with which he is dealing. With this definition, structures become viable instruments with which the organizer can work, applying or relaxing them to different degrees, for the purpose of goal achievement.

Structural organizational concepts are absolute necessities. Without this, the organization would be merely a loose fabric of unrelated parts with little logic and excessive waste. Unresponsive structural organization, however, serves only to bind up the organization in *red tape*. The increasing trend toward police unions and the strengthening of police associations is a result of the demand for *humanism* in administration.

In addition, within the structural organization, rules are necessary, and division of tasks is quite proper. If, however, all the rules were obeyed precisely, with no changes, the organization would come to a standstill. Informal interchange between divisions, for example, accounts for much useful information being exchanged. Formal channels are not the only way to communicate needed information in a police agency.

For instance, it would be difficult indeed for a Detective to follow the formal procedures in obtaining information from a Patrolman. The Detective would have to ask his Sergeant to pass the request to the Detective Lieutenant; who in turn would pass it to the Detective Captain; who would send it to the Detective Inspector; who would forward it to the Deputy Chief, and subsequently, to the Chief. The process would then

reverse itself, going back down through the same chain in the patrol division. Once a response was drafted by the Patrolman, the process would be repeated, but from the patrol division. Figure 2 illustrates the formal process in a graphic manner.

This process, as can be imagined, is highly time consuming and wastes the time of at least eleven people without necessity. Usually this process is avoided by a short conversation between the Detective and *Beat man* in the hallway or a short telephone call, as indicated by the line of informal communication in Figure 2.

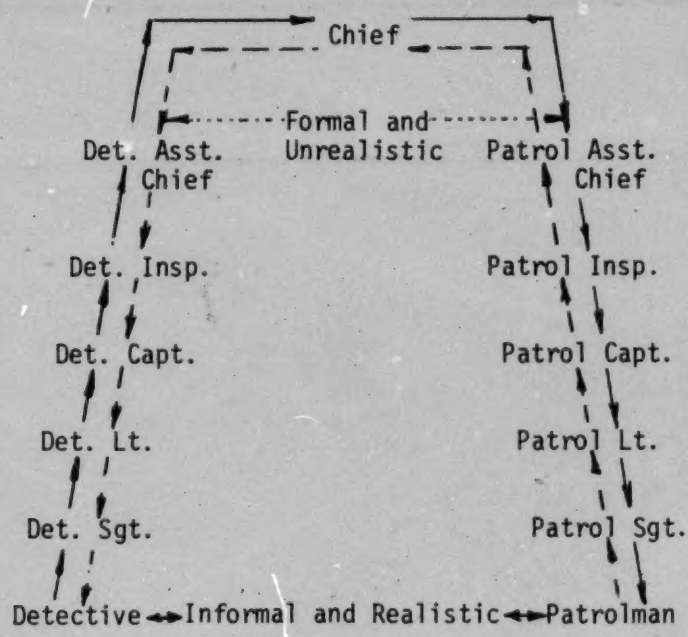

Figure 2. Procedural Methods

More importantly, the structural approach allows little room for *humanism*; that is, man-in-organization. *Man is the key factor to goal achievement and organizational success. Man is both logical and emotional, and his needs must be understood and met, or the organization will be a mere skeleton, unresponsive and ineffective.*

Within the confines of these organizational concepts, most police departments are arranged in four functional ways:

- administrative services;
- personnel;
- operational services; and
- auxiliary services.

ADMINISTRATIVE SERVICES

Administrative services include planning and research, inspection and control, and the police relationship with the public. It is not the intent here to provide a detailed analysis of each of these activities; rather, to give the reader an overview.

Planning and Research

Administration, the task of the Chief of Police, is the process of directing the organization so that it will produce results effectively and efficiently. The Chief's duties are many and varied. Through his command staff, he deploys his men, coordinates their efforts, and controls their activities. He prepares the organization's budget, and plans operations to stay within the limits of that budget.

A good Chief studies the past, analyzes the present, and plans for the future. *Successful administration depends to a large extent upon comprehensive planning.* The extent and complexity of an organization are not factors which determine the need for planning in varying degrees. Every law-enforcement agency throughout the nation must engage in the administrative functions of planning and research, whether the task is accomplished by a single person or a group specifically assigned to this duty.

Inspection and Control

The best planning in the world will fail, however, unless suitable control is exercised over its execution. *It is not sufficient to give an order; it is also necessary to see that it is carried out.* Both of these actions are impeded by communication difficulties or other symptoms of an unhealthy organization. The order must filter down channels through operating personnel without distortion; information must also go back up the channels without distortion, if those who issue the orders are to know whether they are executed. Suitable control is dependent upon followup inspection and effective communication channels within the organization. In this manner, any deficiencies found can be promptly corrected.

In addition to a system for discovering and correcting deficiencies and oversights that are reflected in police records, the Chief needs a system of inspection to assure the discovery of failures that are not so readily discovered by an examination of the records. Compliance with department regulations and operating procedures can usually be assured only by inspection of actions, persons, and things. Many police weaknesses

and deficiencies are traceable to the failure to assure their discovery and correction by means of a system of inspections.

Relationship with the Public

Reponsibility to the Public. Contrary to many diverse advocates, a policeman, as a policeman, is not an animal of love. The policeman must regulate society, and at the same time achieve that fine balance between freedom and responsibility. He must be firm with the criminal, and compassionate with the injured or troubled child. He must adopt the right relationship to fit the needs of the immediate situation in a society where mankind is free to view things differently than do the law enforcers. No governmental system known is more difficult to police than a democracy where individual freedom is the highest ideal. *Yet, it is in such a setting (demoncracy) where man can achieve his greatest heights, and the police are charged with the responsibility of ensuring an environment where all men can live in dignity with the maximum degree of freedom.*

Although some perceive a conflict, there is no conflict here. It has been said that in some respects the community, which is unable to resolve its own contrasting feelings concerning the relationship between law-and-order and freedom, makes conflicting demands (either potential or actual) on the Criminal Justice system. Thus, the community, or some segment of it, demands:

- That appropriate public order must be *maintained* while simultaneously, individual rights of self-expression and free assembly must be *preserved;*

- That crime must be prevented and criminals must be found and *convicted,* while simultaneously, the procedural rights of persons suspected of crime must be *protected;*

- That persons convicted of crimes must be *punished,* while simultaneously, law-and-order and freedom, make conflicting demands (either potential or actual) that they must be *rehabilitated.*

The thought indicated here is that *law and order,* or *domestic tranquility,* is at odds with *freedom.* That is not true. *Freedom can only abound where man can feel relatively safe in his environment. Threats, regardless of their source--whether from the law breaker, or from those who are responsible for governmental coercion--will stifle freedom. Therefore, man can only be free in a safe society.*

Freedom, as a term, is not used here to indicate abandonment, but rather freedom to be responsible and responsive. This,

then, is the freedom law-enforcement agencies must uphold.

Effectively Operating with the Public. The basic police purpose of preserving the peace and protecting life and property is accomplished by controlling the behavior of people. A person's conduct is determined either by what he wants to do, or by what he is afraid or compelled to do. Similarly, public compliance with the law and regulations is obtained either by developing a public willingness to conform to the desired pattern of behavior, or by compelling people to conform by threat of punishment.

Compliance is won principally by force in totalitarian and police states. In other countries where the police are a tool of the central government, they are often used to impose the state's will on the people and to perpetuate it's administration.

In America, on the other hand, compliance with minimum enforcement is the democratic process; it is a basic characteristic of the best British and American police forces. The leaders of these countries are becoming more and more convinced that no lasting good will come of a control imposed on an unwilling people. No real progress is made in the development of order and security except as an attitude favorable to law observance as developed in the people.

This does not mean that enforcement should not be used by the police in a democracy. It does mean, however, that it should not be used except as the general concepts have been approved by the majority.

Compliance won principally by force is a characteristic of police incompetence; it is the hard way to do the job. *Compliance won principally by other means than force is evidence of a high order of police ability; it is the easiest and most desirable method of accomplishing the police purpose.*

The development of effective operating relationships between the police and the public is, then, a function demanding the highest of priorities.

PERSONNEL

Although personnel may not be an entity of its own, the importance of this function deserves special consideration. The area of personnel is basically concerned with police recruitment, training, and promotion.

Recruitment and Entrance Qualifications

Personnel administration has been defined as the art of selec-

ting new employees and making use of old ones in such a manner that the maximum quality and quantity of output and service are obtained from the working force.

Conceived originally as an antidote for the old *spoils system,* public personnel administration has developed into a major phase of public management. These developments have evolved simultaneously with the career service in which appointment and promotion are based upon merit.

In recent years, the selection process has become the central point of interest in the police personnel program. Modern police managers have developed a strong sense of consciousness of personnel problems. They recognize, in today's America, that they must be concerned with the personnel resources at their disposal in carrying out the complex objectives of modern police service. As a result, recruiting standards in the American police services have been strengthened to the point where in the better Departments only superior individuals can meet the requirements. This trend toward the elevation of police entrance qualifications may be seen throughout the entire field of police science and management.

Educational Qualifications. The nature of the duties and responsibilities of the police officer today require intellectual ability substantially above average. With the trend toward a minimum educational standard of two years preparation at the university and college level, individuals are joining police departments better equipped to deal with the complex problems of police work.

This view is confirmed by the increasing number of colleges and universities offering two years of undergraduate work in the police science major, and the number of colleges with a four-year program leading to the Bachelor degree in this professional major.

The International Association of Chiefs of Police recently gave strong backing to the concept of police training at the university and college level. This circumstance is firm assurance that there will be a progressive increase in the number of educational institutions offering undergraduate work in the police major. There will likewise be a continuous increase in the number of university and college trained men and women entering police service.

Many commercial tests are available for the measurement of intelligence and personality traits. In progressive police departments, these tests are included as part of the entrance examination. Psychologists or psychiatrists can be utilized in the screening process of police applicants. *A patrolman should possess greater emotional stability than the average person has. He must be able to cope with frustration and crisis situations.*

In terms of educational background, a high school education is regarded generally as the absolute minimum requirement for entrance to the police entrance examination. An increasing number of departments require, as a minimum, the completion of at least two years of college work, preferably in the police science major. There is an observable trend toward the Bachelor degree as a minimum educational requirement, and police leaders agree that this will ultimately become the standard for all police officers in urban centers.

Physical Qualifications. The demands of police service upon the individual officer place a high premium on physical and mental health. The physical condition of the recruit should be nothing less than excellent.

The police officer requires physical strength and agility, equal to, or above that of the average high school senior. A day's work in a police uniform frequently requires good physical coordination, speed of movement, and physical strength.

However, less emphasis is being placed today on such characteristics as the height and weight of the candidate. Many capable men of somewhat less than average height are lost to police service where there is little or no flexibility in this requirement. However, weight should be in proportion to height, and this is a determination that should be made by a licensed physician.

Age Qualifications. The prevailing age limits for entry into police service are generally from 21 to 31, with a strong tendency in an increasing number of departments to reduce the maximum age limit. Important advantages are gained by recruiting men in the younger age bracket into police service. Experience indicates that the younger man responds better to training; he has more potential years of service; he has greater physical strength and endurance; he is more likely to approach his new assignment on a career basis.

Character Qualifications. The character and reputation of the new recruit must be unassailable. A Police Chief cannot afford to appoint to his force an applicant whose reputation is questionable, nor one whose character is such as to cast doubt on his future actions. It is general policy in virtually every jurisdiction to disqualify any candidate whose record has not been free of violations other than minor traffic offenses.

Residence Requirements. An increasing number of departments have abandoned the residence requirements (that is, pre-employment residence in the community) as a condition of appointment. It is now the feeling that this obstacle to career service in the police field is inappropriate in a police personnel program. It only serves to reduce the number

of qualified applicants from whom the most promising men may be selected.

In general, only the best must be considered for appointment, and any doubt about a candidate's qualifications must be resolved in favor of the department. *The selection process must provide an officer who is best suited to his assignment, and who represents a contribution to the reservoir of leadership in terms of present or potential qualifications for supervisory and command positions.*

Training

The former role and mandate of the law enforcement officer was simple and direct:

- preserve the peace,
- prevent crime, and
- apprehend the criminal.

This older concept, however, has been considerably broadened by social change. The police officer now finds himself playing the role of referee between rival social groups. He finds himself involved in the delicate field of human relations, and he must attempt to understand and utilize the changing social structure of urban society.

The field of law enforcement, by the very nature of its being, must demand and enforce adherence to specific standards, even when such standards are subject, as they are today, to challenge and change. A police officer recruited generally from the area in which he will serve has been shaped in his life by local patterns which reflect the attitudes, prejudices, and values of the community. Through training, the police officer can change his skills and gain more knowledge, but his attitudes are changed by education and positive example.

Training is a somewhat narrow term. *Training has been defined as instruction of certain basic skills which, when mastered, will assist the police officer in performing a particular task.* Training in this regard is limited to conditioning and disciplining people to react in certain ways to a specific situation.

Training of this type is certainly necessary, but the modern police officer also needs exposure to a wider range of knowledge which can provide him with the capability to see social phenomena in their proper perspective. He needs to understand the meaning and purpose of his role in society. The police officer, then, must be encouraged in every possible way to pursue educational objectives beyond that training provided in an academy setting. A strong training curriculum, coupled

with higher educational opportunities, will provide the firm base he needs to make the proper decisions for the preservation of both law-and-order and a free society.

Promotion and Lateral Entry

Lack of Rapid Promotion. Promotional opportunities in a police department, as in any organization, are limited to some extent. The number of supervisory and command positions is relatively small when compared to the total personnel strength of the department. This circumstance tends to freeze personnel in the lower ranks for extended periods of time, resulting in a possible loss of incentive and morale.

With the increasing emphasis on the police field as a career service and the growing number of college-trained officers, the problem of morale is almost certain to be given further attention. The increased proportion of better trained personnel will undoubtedly add to this lowered morale and sense of frustration, because of the slowness of promotion.

Lateral Mobility. The trend toward *lateral mobility* of police personnel is one bright light on the horizon which may offer an approach to this problem. For some years now, an increasing number of cities have been selecting their Chiefs of Police through open competitive examination. It has become common practice in some parts of the United States for a new Chief of Police to be imported from some other department, and frequently from some other part of the country.

This same practice is being increasingly followed for supervisory and command positions which are also being filled in this manner. Several police departments have recently held open competitive examinations for the rank of Captain of Police, which were open to any law enforcement officer with the proper qualifications. These requirements have usually been along the line of five years experience in police service plus three years as a police lieutenant, or as a police sergeant with at least one year of college-level training in Police Science or related subjects. This cross fertilization of professional police is considered a healthy situation for police departments throughout the country.

One school of thought is that good officer material in some of the smaller forces is often wasted because of the lack of opportunity for promotion in those forces, where the number of higher ranks in the organization is small and vacancies in them are few and far between. It is felt that appointments in the higher ranks of all police forces should be made on an open competitive basis from selected applicants recruited from forces in all parts of the country.

Lateral mobility or entry of police personnel offers a number of apparent advantages:

- It opens up the channels of promotion.
- It fosters initiative and enthusiasm for the job, with the knowledge that the opportunities for advancement are greater than before.
- It enhances police morale.
- It encourages a career service.
- It widens the field of candidates for supervisory, command, and administrative positions in the police service.
- Police service becomes more attractive to the potential recruit when he knows that his chances for promotion are amplified.

OPERATIONAL SERVICES

Operational services of police departments are usually divided into the four separate functions of:

- Patrol,
- Criminal investigation,
- Juvenile delinquency control, and
- Traffic control.

The Patrol Function

Although patrol is discussed in greater detail in a separate unit, the importance of this service calls for a brief statement here.

The principal duties of patrol in the police department are the prevention of statute and ordinance violation, suppression of disturbances, arresting of offenders, and giving aid, relief, and information as circumstances require. These are accomplished by active patrol on the street in all areas, and particularly those areas where crime frequently occurs. An active patrol force is the open guarantee of orderly government carried out, if possible, by persuasion; if necessary, by force. The basic purposes of patrol may be classified as:

- Prevention of crime,
- Suppression of criminal activity,
- Apprehension of criminals,
- Preservation of peace,
- Regulation of conduct (non-criminal), and
- Protection of life and property.

These objectives cover a wide scope, and the operative methods of procedures applied by patrolmen in their achievement are marked by an even greater variety and range.

Most patrol activities may, in turn, be classified under these general headings:

- Patrol and observation,
- Control of public gatherings,
- Miscellaneous field services,
- Answering calls,
- Disposing of complaints,
- Investigation on patrol,
- Preservation of evidence,
- Arrest of offenders,
- Preparation of reports, and
- Testifying in court.

Criminal Investigation

Police activity in the detection and apprehension of criminals is called *criminal investigation*. Such inquiry and observation are not confined to public police agencies. Private investigation forces, however, usually confine their efforts to limited areas of jurisdiction, such as the railroad police, or to certain classes of crime which affect domestic relationships, or the financial interests of the commercial world.

Most of the known serious crimes are investigated by the publicly supported police forces. The public interest is affected by these crimes, and the safety of lives and propery may depend upon the effectiveness with which the responsible persons are apprehended, prosecuted, and punished.

All branches of police service and nearly all members of the force are engaged to a greater or lesser degree in some form of investigation. The detective division, however, has responsibility for the investigative duty, from the point where the preliminary investigation (by the patrolman) is discontinued. The major duties of the detectives include the apprehension of the criminal and the recovery of stolen property (when these tasks have not been accomplished by the patrol division), and the preparation of the case for presentation in court (assistance to the prosecutor). These tasks are now and always have been basic detective duty.

When the patrol division does arrest the perpetrator of the crime and recovers property, the detective still has the responsibility of continuing the investigation so that all evidence will be suitably organized, analyzed, and prepared for court presentation in the most effective manner.

Juvenile Delinquency and Control

It is clear that juvenile crime represents a serious problem to the police and to the community. The position of the police

administrator should be strongly on the side of preventing juvenile delinquency through every resource that is open to the police department.

All large cities and many small ones detail one or more special offices to handle cases involving juveniles. This step is recommended by virtually all of the police and social work agencies that have been successful in reducing offenses by young people or preventing the threat of delinquency. Juvenile officers may be a special class of policeman, appointed on the basis of education and aptitude for youth work; therefore, it is sometimes suggested -- and has been experienced in some places -- that they are set apart from other divisions of police work. Some experts claim that this should not be allowed to happen and accordingly, they feel that juvenile officers should come from the regular police force.

It is usual for the juvenile or youth division to handle all cases involving juveniles and cases of adults who have committed offenses against children. There is logic to this decision. The trained juvenile officer is better able to question the juvenile victim than is the detective, and he has had more experience in dealing with parents. Another fundamental function of a juvenile division is the protection of children from depraved persons and from environmental hazards. The police unaided cannot offer adequate protection to all children of the community. Concentrated planning and programming by all agencies is required in performance of this function.

Traffic Control.

Police traffic divisions for many years have been charged with responsibility for aiding traffic flow as well as for enforcing traffic regulations. Their work has multiplied with the growth and changes of our modern society -- moving more cars, investigating more accidents, citing and prosecuting more violators, and enforcing parking restrictions. Thus the problem for the police is two-fold -- organization for traffic enforcement in relation to other police functions, and legitimate areas of specialized police traffic activity.

Traffic enforcement is perhaps one of the most difficult problems the police face. On the one hand, traffic accidents cause the death of over fifty thousand of our citizens per year. Obviously, if everyone operated a motor vehicle in accordance with the traffic laws, there would be few accidents. On the other hand, our society does not think of traffic violations as a criminal offense; such violations involve nearly every citizen at one time or another; and they usually leave a shadowy grey area where the offender is sure the law was not broken. In fact, the operation of a motor vehicle in violation of the traffic law is often seen as a game, particularly

among youthful drivers. It is a deadly game indeed. The traffic officer is not to be envied.

AUXILIARY SERVICES

Auxiliary services are those areas -- communications, recordkeeping, and jail management -- which are not primarily involved in the enforcement of the criminal law as such. They are, however, key ingredients to any effective law enforcement agency.

Communications

Policemen in 17th century England carried bells or lanterns which served to identify them, and to give warning or summon assistance. There was little improvement in police signal contrivances during the 18th century. Police instructions of the late 19th century directed the officer to give three blasts on his whistle or three raps on the pavement with his baton (nightstick) when help was needed. His alarm was taken up by the officer on the adjoining post and passed in a similar manner to the next policeman, thus creating a chain of communication. When he really was in great need of help, the officer was authorized to discharge his revolver three times in the air to call other officers.

The whistle, nightstick, and revolver still have their place as signal and alarm devices in connection with police duties, but various electrical instruments now provide long-distance communications. The telegraph, recall light, telephone, teletype, wireless telegraphy, and radio -- all electronic technologies -- accomplish the purpose with greatly increased efficiency.

A review of police radio history reveals rapid progress in a relatively short period of time. The Pennsylvania State Police were the first to make practical use of radio when they established radio-telegraph communication between headquarters in Harrisburg and the field stations. The Detroit police department in 1929 was issued the first police radio-telephone license which enabled the dispatchers to talk to patrol car drivers by short-wave, one-way radio.

During the 1930's, a substantial number of police departments installed radio transmitters at their headquarters with receivers in their patrol cars. After about 1935, there was rapid development of two-way police radio communication, which proved to be as revolutionary as the earlier adoption of the one-way system.

Two-way radio enables the car to talk to the station, and the

station to talk to the car. In this system, the station transmitter is on one frequency or wavelength of operation, while the mobile units operate on a different frequency. Two channels are thus required.

Shortly after this advance, three-way radio systems developed. These permit transmission from station to car, car to station, and car to car. The most common three-way system has the station and mobile units on the same frequency, thus requiring only one channel of operation.

While voice communications received principal attention during this time, radio-telegraph was also developing in the form of the interagency network. This was a necessity, since the police were prohibited from using, for intercity communication, the frequency channels that were assigned for purpose of communicating with mobile units. The police radio-telegraph or teletype network provides nationwide communication facilities that are independent of private corporation services.

Probably the greatest advancements in police effectiveness and efficiency during the past century have been accomplished through improved communications. Police radio equipment has become so inexpensive that it is within the range of the smallest department.

It is the responsibility of the communications unit to maintain current communication devices and recommend changes and upgrading when it becomes necessary.

Record-Keeping

Probably one of the most expensive and time consuming elements of law enforcement is the generation, storage and retrieval of adequate records. Its worth, however, has been proven time and time again. The adage that *a police department never forgets* is based upon the development of adequate record resources.

In close association with communications, an accurate and complete records system will reveal in words and statistics a picture of police problems and activities. Good records show a part of police work that contributes to the protection of life and property and the smooth flow of written communications. Police records should also reflect the need for police service and the effort of the police to provide the needed service.

The nature of police work justifies emphasis on criminal records, but other records must also be maintained. Every reasonable physical and administrative facility should be provided to record the essential activities of the police department. These records are the tools of intelligent administrative supervision and review.

Jail Management

Persons taken into custody by the police are likely to be extremely upset mentally and emotionally. Where possible, people who are not under arrest for a criminal offense should be handled as patients rather than as prisoners. People who are under arrest, however, must be secured from possible escape until their appearance before a magistrate or until they have obtained legal release.

The police are not penal administrators, and their jail facilities are normally planned only for the purpose of temporary custody. Once convicted, it is seldom that prisoners are held in a police-operated jail facility. Jail management is, however, an essential support service, since it provides a field officer with a facility where he may temporarily lodge those individuals reasonably believed to have committed a crime.

STUDENT LEARNING ACTIVITIES

- Obtain a copy of the organization chart for your local police department. Ask an officer to describe the responsibilities and relationships between various jobs listed on the chart.
- Ask the local police department for a copy of its salary scale. Determine what other fringe benefits are included as a part of the salary. Find out the personal costs, such as uniforms or professional dues, that police officers are expected to pay.
- Describe the qualifications needed to become a police officer in your community, city, county, parish, state, or federal police departments.
- Write a report on the in-service training programs used by your local, county, parish, or state police departments.
- Describe the duties of police as outlined in the *Occupational Outlook Handbook* and compare these with the duties of your local police department.
- Determine the number of police officers and police agencies operating in your community at the local, state, and national levels. Prepare a class report describing the various responsibilities of each of these agencies.
- View and discuss films on the role of the police in our society, for example, *Police Power* and *Under Pressure*.
- Debate this statement: *Law and order, and individual freedom are closely related in present day police work.*

TEACHER MANAGEMENT ACTIVITIES

- Set up a bulletin-board display describing activities of various police agencies.
- Arrange for a class tour of a police station.
- Collect tapes of a police radio dispatcher at work on a busy Saturday night and play these for the class as an example of some of the types of activities performed by police.
- Conduct a class discussion on qualifications needed for entry level work in a police department, including examinations commonly used in your state.
- Compile a file (with the appropriate permission from police agencies) of examinations used for entry-level police officers.
- Compile and display samples of training materials used by various police departments.
- Request students to write reports describing the qualifications needed for various local, state, and federal law enforcement agencies.
- Show films on the role of police work, as for example, *Police Power*, and *Under Pressure*.
- Arrange to have your class debate current issues in the police administration, such as, *Law and order, and individual freedom are closely related in present day police work.*

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Unit 2

BASIC ELEMENTS AND ISSUES IN ADMINISTRATION OF JUSTICE

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Unit 2

BASIC ELEMENTS AND ISSUES IN ADMINISTRATION OF JUSTICE

INSTRUCTIONAL OBJECTIVES

1. Ability to demonstrate a knowledge of the various parts of the justice system.
2. Ability to recognize the different roles played by the various parts of the justice system.
3. Ability to form personal opinions about the justice system.
4. Ability to understand the ways the justice system works.
5. Ability to develop opinions about new changes in the justice system.
6. Ability to appreciate the human relations role in the administration of justice.
7. Ability to value the importance of the national justice system.

CONTENT

INTRODUCTION

There are many different parts of the system of justice. Although police are the most visible and are the ones most commonly portrayed in movies and on television, they are only one part of a very large system. At this time, there are over 46,000 government agencies working in the administration of justice. These agencies cost the taxpayers nearly six and one-half billion dollars a year to operate. In an attempt to make American streets safe and free from crime, the government has developed a big and very expensive system. This can be divided into three general categories: legal, enforcement, and correctional systems.

LEGAL SYSTEM

Courts

There are over 13,000 courts in the United States. Most individuals know about the *Criminal Courts* which hold trials relating to the general problems of crime. There are many other courts, however, which are part of the administration of justice.

International Courts. International courts, for example, are established to try crimes like those committed against the Jewish people in World War II. The most famous of these trials were held at Nurenberg, Germany, where Nazis who had committed terrible crimes were tried and convicted, some being executed.

The Supreme Court. Perhaps the most important court in the administration of justice in this country is the *Supreme Court of the United States.* This Court, by interpreting the United States Constitution, generally makes the rules by which the rest of the justice system operates. This is done on a case-by-case basis and the rules may change from time to time. Because of the ability to change the rules, the U.S. Supreme Court can make sure that the justice system remains modern, even though standards of conduct established by society may change.

District Courts. Before a case is taken by the U.S. Supreme Court, it is usually reviewed by the *U.S. District Court of Appeals.* Additionally, there are 87 District Courts in the 50 states which have federal jurisdiction only. There are also four District Courts -- Washington, D.C., Panama Canal Zone, Guam, and the Virgin Islands -- which hear local cases in addition to those of federal interest. It must be remembered that the major part of the administration of justice occurs in the local community, and that a case must involve a constitutional question before the federal courts become interested.

State Supreme Courts. Each state has its own court system and is responsible for the general administration of justice in that state. Each state has one court with the power to review and change the decisions of all other courts within the state. This court is usually called the *State Supreme Court* but may also be called the *State Court of Appeals, Supreme Judicial Court, Supreme Court of Error,* or *Supreme Court of Appeals.*

Courts of General Jurisdiction. Most of the actual work of the Justice System occurs in what are called the *Courts of General Jurisdiction.* The actual court title varies, for example; in California they are called *Superior Courts,* but in New York they are called *Supreme Courts,* which are not the

same as the highest court. These are the courts which hear the majority of cases involving criminal acts. They can sentence or fine as provided in the law, and may hear appeals from the *Courts of Limited Jurisdiction.*

Courts of Limited Jurisdiction. These are usually identified in terms of the amount of fine or length of sentence they can impose. Usually they cannot give more than a fine of one thousand dollars, or a one-year sentence in a county or city jail. They may be identified as *Police Court, Municipal Court, City Court, County Court, Magistrate Court, Justice Court, or Justice of the Peace.* The Courts of Limited Jurisdiction may also hold preliminary hearings. The purpose of a preliminary hearing is to have a judge review the facts of a major criminal case to determine whether there is reason to continue the trial at a higher level.

Law

Federal Laws. Most people realize that laws are the rules which govern our conduct. *The Constitution of the United States is the Supreme Law of the land, and no other law may be in conflict with the meaning of the Constitution.* It is the responsibility of the U.S. Supreme Court to determine whether a law is in conflict with the meaning of the Constitution. There are also federal laws which must be obeyed. For example, there are laws against treason, non-payment of taxes, and kidnapping.

State Laws. Each state has a Constitution similar to the federal government's. The federal Constitution, however, is limited to the power given it. If the Constitution does not include a subject -- as it is interpreted by the U.S. Supreme Court -- the federal government has no jurisdiction. On the other hand, a State has all power to act unless it has restricted itself by its own Constitution or if its actions are restricted by the federal Constitution.

In general, an act is criminal if it is included in the criminal law of the state. It is not criminal if there is no law against it. Sometimes this causes confusion. For example, gambling may be illegal, and therefore criminal, in one state; it may be legal, and therefore not criminal, in another state. Another example of possible confusion is the variance in ages considered to make a person an adult in various states. It is, however, each state's system of criminal law that is the most important to the administration of justice in that state.

Counsel

Only about one-fifth of the justice agencies work in the areas of prosecution and defense. Public prosecutors' offices outnumber public defenders' offices by approximately 22 to 1. There are over 8,000 public prosecutors' offices in the United States, and less than 400 public defenders' offices. It must be remembered, however, that most defense attorneys are not part of a public office, but are in private practice.

THE ENFORCEMENT SYSTEM

There are nearly 15,000 government agencies which are responsible for the enforcement of the criminal law. Of these, over 14,000 are part of the state or local governments, and less than 1,000 are part of the federal government.

Federal law enforcement agencies are established to perform special services and are limited to those areas. Among the federal agencies are: U.S. Department of Justice, Federal Bureau of Investigation, U.S. Treasury Department, Secret Service, Department of the Army, Provost Marshall General, and the Department of the Air Force, Inspector General.

State Law Enforcement Agencies

Every state has some form of police agency, usually called the State Police or the Highway Patrol. They may be limited to enforcing traffic regulations, or they may enforce all of the state's laws. The famous Texas Rangers were the first of the modern state police systems.

Various states may also have other police agencies assigned to special tasks. These agencies range from Narcotics Bureaus to State Crime Commissions, and each is assigned a specific responsibility to which they are usually limited.

County Law Enforcement Units

Usually called Sheriff's Departments, county units have been famous since the tax collectors in the days of Robin Hood.

Originally appointed by the governor, the Sheriff is now usually elected, and in some states appoints those who work for him. Thus, if a sheriff is defeated in an election, it is common for the new sheriff to appoint those who have helped him as deputies. In other states, sheriff's deputies are regular civil-service employees, and stay on the job regardless of the current elected sheriff.

Although the Sheriff is considered a law enforcement officer, he is frequently required to perform services which are not a legitimate part of enforcement. For example, in some states he may still be required to collect taxes, fight fires, provide jurors, and serve divorce papers or eviction notices.

Municipal Police Agencies

Most people have reference to the sworn personnel of Municipal Police Agencies when they say "the police." The police make up the largest part of the more than 14,000 enforcement agencies in this country.

The Municipal Police have the broadest authority, enforcing all laws (including federal, state, and local), unlike other agencies which are limited. They also have the greatest effect upon the average citizen, are the most expensive to operate, employ the most people, and are subject to the most criticism. To the average citizen, the patrolman is the most important person in the entire justice system. He must turn to the patrolman in his time of need, and most often it is the patrolman who must first act to set the remainder of the system in motion.

THE CORRECTIONS SYSTEM

The correctional system may be divided into the categories of: institutions, probation, and parole. There are over 7,500 corrections agencies in the United States, of which about 800 are designed for use by juveniles.

Probation and Parole

Often confused, probation and parole are easy to tell apart. Probation is a system of limited control granted to a person instead of requiring him to spend time in jail or prison. Parole is given after he has served a minimum part of a sentence if his behavior has been good. Both return the individual to the community and both require that the individual obey certain rules. Examples of the rules are: obeying curfews, reporting to a supervisor, and not associating with criminals or ex-criminals.

Penal Institutions

The Auburn System. Penal Institutions include both jails and prisons. The present pattern for our correctional network comes from England and New York's Auburn Prison of 1821. The idea at that time was that prison had to be a frightening

place if prisoners were to be saved from themselves. Prisoners were kept in solitary confinement, they were not allowed to talk, could not have visitors, and could neither see nor hear each other. They were to think about the evil of their crimes in solitude.

The "Auburn System" became the model for other prisons in this country, with one important change. Prisoners were generally required to work long hours and whipped if they were lazy. They still were not allowed to talk and all movement was in marching order. It was felt that the more horrible a prison was, the more it would prevent crime among the general population who would be afraid of being sent to these institutions.

Modern Institutions. Modern prisons have changed a great deal from the 19th century. Today the emphasis is upon individual counseling, vocational, and educational training. The goal of the modern prison is to hopefully rehabilitate the offender. The difficulty, however, of handling 2,000 or more people, in closely confined quarters, all of whom have been found guilty of criminal acts, requires that discipline be maintained.

Where long sentences (30 to 40 years) were common in the past, today the average time a person actually serves before parole is often less than two years. Some of these people are released to a *half-way house* where they live and return after work each day. These places provide the released prisoner the opportunity to learn to live in society again. They also give him the opportunity to enter vocational training programs, so he will be able to find better work upon release.

Many correctional institutions now offer the individual a chance to finish high school and take college courses. Prisons are no longer like Auburn of 1821. They are no longer horrible institutions intended to frighten the public. Most are social-service organizations working toward the rehabilitation of the offender, under very trying conditions, with an ever-increasing prisoner population.

MANAGEMENT OF THE SYSTEM OF JUSTICE ADMINISTRATION

One of the most important purposes of local government is the protection of its citizens. On the other hand, one of the rights of the citizen is the establishing of that form of protection best serving his needs.

However, no policeman, police activity, or police operation exists alone. All police function within the system of administration of justice and contribute toward one of the most expensive parts of that system.

The issue then, becomes extremely complex when it is understood that local control of enforcement itself is required in a free society. Yet, the support tools necessary to quality enforcement can often be provided more economically and more expertly on a broader basis.

Disadvantages of Small Systems

One of the most pressing problems faced by the smaller agency is the obtaining of services and resources which are available to larger departments with greater resources.

The problem is important since the majority of the nation's police agencies have three, or fewer officers, and the average size of the American police department is only ten men. The need for training, laboratories, records, communications, and other supportive services is not lessened by the smaller size of the police agency, but availability is greatly reduced. It is simply not practical, regardless of obvious need, for the small police department to support a police academy, a large records system, or a laboratory.

Centralization of Police Services

Smaller departments have found it necessary to identify methods of overcoming some of the disadvantages of their size. One method that is fast becoming commonplace is the bringing together, or *centralization* of police services. Centralization, in different terms, is really cooperation between various systems, or the pooling of services. Centralization can provide the smaller department with support services that are far beyond the limits of its own budgets and resources.

The difficulty is that cities and towns like to govern themselves, but the problems, particularly in large urban centers, do not stop at a city's boundaries.

The polluted air or water in a city does not stop flowing at the man-made boundaries of that city. Or, when a crime is committed in one city, the criminal may hide in another. Man-made boundaries will not hold man in illegal pursuits.

On the other hand, there is a suspicion of *super-government* which, combined with the usual fear of the unknown, defeats many proposals directed toward the solutions of these problems.

The centralization of police support services, however, involves no changes in existing governmental boundaries or political structures. Rather, it represents responsible exercise of the powers of local self-government, with more effective and less costly support services to local police agencies.

The system of justice administration is attempting to perform the most difficult of tasks with resources which are limited beyond those considered normal. The limitations on personnel costs and other items are hurting many of the agencies. Regardless, these agencies have generally been performing in a way which produces better results than should be expected in light of the lack of resources.

Managerial Problems

There are problems, usually printed in the local press, which are not uncommon anywhere large groups of men work together. This is the bad side of what is frequently called the *human factor*. Most of this is human error. Many of these mistakes are caused by the use of procedures, in use for many years, in a society which is now trying to help those who have made a mistake.

Administrators have been subjected to criticism of their methods of operation and management. Some have felt that new ideas are ignored by some administrators; that they are content to keep going in the old manner, and do not want to consider change. But should the administrators receive the most blame for present conditions? They should not. The administrator is, in the majority of instances, selected by the governmental administrator. And, it is to this government the justice system must go for its resources.

FUTURE ASPECTS OF THE ADMINISTRATION OF JUSTICE

Most people have a desire for recognition; they want to be accepted. Policemen are no different. Knowing they are important gives people self assurance and job satisfaction; it tempers their anger and frustration.

The police forces, numbering over 700,000 employees in all, are changing. Those employed in the criminal justice system are telling their friends and neighbors that the role society has defined for the policemen, the correctional officer, and the court personnel has to change. Proof of their sincerity rests in the fact that there are in excess of 65,000 men and women throughout the United States, who are currently taking subjects on college campuses in an effort to upgrade themselves.

Changed Professionalism

Everyone seems to want changes in the criminal justice system, since most will admit that change is long overdue. And, one area of change that most agree is needed is *professionalization*. Some individuals take comfort in the words, make a

banner for displaying and raise it on high for all to see. However, it takes more than a label, a banner, or a word to change a system that through neglect has failed to enter gracefully into the twentieth century.

Professionalization should, however, have meaning; meaning in the true sense of higher standards and improved performance.

Federal Assistance in Financing

With the passage of the Omnibus Crime Control Safe Streets Act of 1968, the power of control over the purse strings to finance anti-crime programs went to the states. This fact of life will become more apparent as the Congress implements the revenue-sharing plan.

Need for Uniform Standards

In terms of professionalizing criminal-justice manpower, however, it is unfortunate that personnel standards for public safety employees are substandard in some states. In these states, no market is available for the college graduate with a law enforcement major. Personnel standards are too low; salaries are not attractive, and to require a college degree of the entering police recruit would not work; in these areas training is also substandard, if there is any training at all.

More and more states, however, are recognizing the importance of manpower development and are beginning to believe what so many have been saying for so many years, that our American system of justice will be as good as the men and women who are employed in it.

Changed Social Roles

The administration of justice is emerging in a truly responsive social role far beyond the view of many persons who identify it with the limited functions of crime repression. These people have perceived the administration of justice as a mechanical treadmill of investigation, identification, apprehension, prosecution, and punishment.

However, the role of the system never has been clearly defined by the vocation, and has varied from time to time and place to place, during comparatively short periods of time.

For example, a general order issued to the New Police of London, England, in 1829 stated that it should be understood that the principal object of the administration of justice is the prevention of crime. To this end, every effort must be

directed. The security of the personal property, the preservation of the public peace and all other objects would thus be better achieved by prevention than by the detention and punishment of the offender after he has succeeded in committing a crime.

In the police literature of 1928, it was said that most of the work of a patrolman should be done quietly with the social-service point of view always in mind, under circumstances which made mere size and brawn count for little.

Throughout American history then it has been recognized that *protection of life and property* were far from good descriptions of the administration of justice. Certainly, modern society demands much more of its peace-keepers.

So the questions are:

- What are the responsibilities of the justice system in a society where even the foundations of that society are subject to challenge and often change?

- Is this a society where administration of justice is an agent of the people and should be responsible to popular opinion and control?

- Should administration of justice respond, not only in the formal legal sense, but also in tune with trends of opinion and belief in the larger culture?

Answers, if any, to these questions seem to lie in broadening the traditional ideas. In that way, one can see administration of justice in a truly responsive and helpful social role, where it will accept the charge to insure an atmosphere in which all men can live with maximum freedom and dignity in safety.

Repression and threat, or crime prevention and social service depend, not only on the education, motivation, and perspective of the administration of justice, but also on the voice and heart of the American community.

American justice services need to change in the same manner as societies need to change. Recommendations for change will come from private, academic, and governmental sources.

PROBABLE ADMINISTRATION OF JUSTICE IN THE YEAR 2,000

Change in Personnel. Police headquarters will be operated much like a large county hospital with many different types of personnel - professional, subprofessional, technical, mechanical, and clerical. The agency will engage in services

to the public, in research, education, and training, and will work closely with the social sciences and the universities and colleges.

There may be a change in name for the policeman as he comes to take on a broader role than that of *crook catcher*, and as he changes from a *law-and-arrest* oriented person to a *people-and-service* oriented person. Perhaps, he will be known as a *Human Affairs Officer* or a *Public Affairs Specialist*, in place of the current title of Patrolman.

Change in Laws and Functions

There will be a change in the criminal law, with many current crimes redesignated as *administrative infractions*, or as counseling matters for non-punishment supervision by psychologists, psychiatrists, or psychiatric social workers.

In that light, many traffic problems might move to a separate department. For certainly, an overtime parking violation can be regarded as other than a criminal act to be investigated and handled by the police.

Many juvenile functions may move to a separate agency. A curfew violation for example, might be handled better than with a criminal record. At any rate, a thorough-going reform in criminal law will alter the administration of justice in many areas.

Change in Education

There will be changes in education. The educational programs will increasingly insist on a broad liberal education for careers in administration of justice. Emphasis will be on the humanities and behavioral sciences, with lesser interest in subject matter oriented toward technical skills.

The colleges and universities will be less interested in justifying the present. They will be more efficient and more interested in the kind of research and analysis that will lead to wide-scale experimentation, much of which will literally wipe out many current customs and practices.

Change in Structure of Organizations

There will be, in the future, high compensation for professional work and a change in organizational structure. There will be far less rigid military items, such as rank, and much more acceptance of professional ability as a measure of worth.

Change in Public Acceptance

There must be a better relationship with the public. There will be increased citizen participation in decision and police making as administration of justice changes its operations in order to involve the people.

Community-relations programs will be developed that are not public-relations programs. They will not be crime prevention programs nor youth programs, but programs designed to involve the total community.

There will be less efforts to deal only with the responsive and acceptive elements of the community, and more efforts to deal with individuals and groups who are critical of the system, who do not cooperate, and who are unpopular in the community. This is at the heart of any productive community relations program.

There may be increased commitments to those who lack social position, economic advantages, or political power. For example, new units may be formed to deal with white-collar crime and consumer frauds. Other units would deal with political graft and corruption, while still others would exist to assist all social groups in receiving just and fair treatment from private and government institutions.

SUMMATION

There will not, however, be much new development unless beginning patrolmen are made aware of the social dynamics of today's society, and begin to react sensibly by making meaningful changes in administration, supervision, and operations. Administration of justice must become as committed to social service and due process as it is to crime control and repression - and totally humanized, relevant, and alert to the needs of the day.

STUDENT LEARNING ACTIVITIES

- Observe a courtroom trial and write a description of the proceedings leading to the administration of justice.
- Describe to the class the role of judge, defendent, lawyers, police, and others involved in court proceedings you have observed.
- Interview a lawyer and ask him to describe the court system in your state.
- Prepare a class report describing the authority and jurisdiction of one or two levels of courts.

- Write a report describing the history of the American penal system and modern trends toward criminal rehabilitation.

- Obtain the costs of operating your local law enforcement agency and courts from your municipal town clerk or county clerk. Describe these costs to the class.

- View and discuss films on the administration of justice, for example, *Image Changers*, *The People's Right to Know: Police Versus Reporters*, and *Understanding the Law: Equal Justice for All.*

- Debate statements such as, *Administration of Justice must become as committed to social service problems as to crime control and repression.*

TEACHER MANAGEMENT ACTIVITIES

- Ask a police prosecutor or district attorney to explain his responsibilities to your classes.

- Arrange for law students from a nearby university to conduct a mock trial in your class.

- Arrange for representatives from federal, state, county, and municipal law-enforcement agencies to discuss the various roles of their agencies and types of career opportunities available with these agencies.

- Obtain copies of curriculums in police science offered at colleges and universities in your area, and describe these offerings to students.

- Compile a file of newspaper articles describing how police departments in your area are improving their efficiency, such as by cost sharing, centralization of support services, etc.

- Show and discuss films on the administration of justice for example, *Image Changer*, *The People's Right to Know: Police Versus Reporters*, and *Understanding the Law: Equal Justice for All.*

- Encourage your students to debate statements such as: *Administration of Justice must become as committed to social service problems as to crime control and repression.*

RESOURCES

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Unit 3

PREVENTIVE PATROL TECHNIQUES

Here are the contents for Unit 3 of the Public Safety Group. We suggest a careful reading of it before you read the text.

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Unit 3

PREVENTIVE PATROL TECHNIQUES

INSTRUCTIONAL OBJECTIVES

1. Ability to provide a basic background relative to the development of American police patrol.
2. Ability to describe the function, effectiveness, and processes of police patrol.
3. Ability to describe the basic methods and major limitations of preventive patrol.
4. Ability to understand the service functions of patrol.
5. Ability to appreciate tne importance of checking the physical security of business places and other high-risk locations.
6. Ability to recognize when it is necessary to identify and question suspicious persons.
7. Ability to develop attitudes which would help to gain citizen cooperation in crime prevention.

CONTENT

INTRODUCTION

Development of Full-Time Paid Police

Police patrol historically may be a consequence of an increasing loss of neighborhood responsibility in the lives of Americans. In the rural days of the nation, people largely policed themselves, knowing and trusting their neighbors and distrusting strangers. Law and law enforcement were last resorts.

The colonial period had followed the British pattern with

unpaid watchmen. As in England, however, this proved ineffective and America followed the English pattern of development. In America most of the watchman systems provided for police only during the night, with each able-bodied man responsible for law and order during the day. To supplement this system, cities began adopting a separate day watch, using full-time paid personnel. New York City, in 1833, was the first to implement this system.

The day watch, however, was entirely separate from the night watch, which made two separate police forces in the city. In larger cities there were often more than two, as each precinct, ward, or parish established its own. This day-watch system was ineffective due primarily to its self-contained nature, but also since the personnel were political appointees of the mayor or precinct captain, on the recommendation of the political group in power. By 1856, the use of separate day and night watch systems had completely failed.

In 1857, the New York State Legislature passed the *Metropolitan Police Bill* modeled after an English law calling for the reorganization of the police. By the 1870's, the largest cities had full-time paid police. However, it was not until the early 1900's that most of the cities of major size had adopted this system. In fact, some smaller cities today do not yet have fulltime police activity.

Patrol, as a system, was a product of the cities. Perhaps patrol best succeeds when it tries to return to city residents the chance to police themselves with precinct stations or neighborhood councils. Modern technology, however, makes this task much more difficult. Although patrol was initially a foot or beat-walking operation, modern technology has given the criminal such ease of movement that patrol can no longer be confined only to a man walking a beat.

THE PATROL FUNCTION

Role-Perceptions of Patrol

Almost any discussion of the patrol function begins with a reference to the indispensable part it plays in law enforcement. Today, the patrol function is considered to be the hub or backbone of the police agency.

An Action Arm. Patrol is, in fact, the action arm of the police department. Its field functions have a great range of variable actions:

- conducting preliminary investigations of murder, robbery, and burglary,

- responding to reports of sudden disaster,
- herding cattle off expressways,
- arbitrating domestic or family disturbances,
- searching for lost children,
- transporting sick and injured persons to medical facilities.

A patrolman must combine the knowledge and qualities of a priest, physician, lawyer, banker, welfare worker, and family friend.

A Display Case? Another generally accepted theory is that the patrol force is a *display case* for the entire police organization. Since the patrolman is the most frequently seen police representative in the community, he becomes the symbol of the department. The community forms its opinion of the entire police operation on the basis of the appearance and performance of the uniformed patrolman.

Much of the law-enforcement officer's work requires that he become involved in the closest personal way with the lives and problems of citizens of all kinds, since his job is essentially the delicate task of controlling, directing, and regulating human behavior. Almost everyone involved in the administration of justice agrees that the patrol function is vitally important to law enforcement.

Preventive Patrol

Law-enforcement agencies have specific tasks to perform for the community they serve. First and foremost, crime must be controlled -- it must be prevented. When the police fail to accomplish this primary duty, they then must perform a variety of other duties designed to apprehend the offender and to recover stolen property.

To successfully prevent criminal activity, the beat officer must be familiar with the conditions which create crime.

In every crime there exists these combinations of factors:

- the desire of the criminal to commit a crime, and
- the opportunity -- or the belief in the existence of the opportunity -- to commit the crime.

Police action cannot effectively deal with the *desire* of the offender. However, police activity can and must deal directly with the criminal's *belief* that the opportunity for criminal

activity is present.

Aggressive Preventive Patrol. To create the belief that the opportunity to commit a crime does not exist, the police engage in activities which place them most frequently in the location of criminal activity at the times when that activity is greatest. In other words, the criminal must be convinced that there is such continuous police coverage in sufficient strength that the risks involved in committing a crime are too great.

The criminal is a gambler. He measures his desire to commit a crime against the chances of being caught. When the chances of arrest are low -- such as when patrol coverage is weak or lacking -- the crime will be committed, and the criminal will escape. However, where aggressive patrol constantly impresses upon the criminal the idea that his activity will either be observed or will result immediately in his pursuit and capture, he will consider the risks to be too great. He will then tend to be prevented from his desired activities.

Aggressive Patrol and Type of Crime. The effect of patrol on criminal activity depends upon the type of crime involved. The individual who becomes so enraged that he commits a homicide will not be controlled to any great extent by motorized or foot patrol, or for that matter, by provisions of punishment in the law. The person desperate for narcotics will take far greater risks than the criminal whose *habit* has been satisfied. Just as some crimes are not easily prevented or controlled by patrol, others are unquestionably reduced in the face of aggressive patrol activity.

The person planning a burglary can be convinced that the opportunity to successfully do so does not exist when he knows that patrol officers are active and alert. As he studies the habits of the police, he knows that the beat patrolled by the officer who frequently checks the doors of the business establishment is not a safe one in which to work. He knows that a frequent and irregular patrol pattern is such that he cannot rely upon any fixed amount of time in which to strike without running the risk of having that beat car turn a corner and catch him in the act.

Methods of Aggressive Preventive Patrol. There are two basic methods for engaging in aggressive preventive patrol:

- To check frequently and irregularly the physical security of business premises to prevent burglary and robbery, and

- To check the citizen frequently -- to stop the suspcious person, to question his identity and activity, to be constantly alert for persons within the beat who are up to no apparent good.

Crime prevention is the responsibility of more than just the police. The citizen himself must be reminded of his obligation to make his store secure through the installation of proper locks, lights, and alarms. He must be reminded to lock his car, to notify police of his extended absences from home, and to avoid hazardous locations during certain hours. In short, the citizen must be interested in his own protection. Frequently, this interest must be stimulated by the person most familiar with hazards -- the beat officer.

There are a number of specific techniques which the professional police officer develops in becoming a fully effective crime fighter. He goes beyond the confines of his automobile to challenge suspicious persons -- persons whose actions betray possible criminal intent, or who appear not to belong on the beat. He physically checks the security of business premises during the night hours. This means more than shining the spotlight on the doors and windows. It means that he comes in direct physical contact with the doors, and positively determines that they are not only closed but locked. He continuously alerts citizens to take sensible precautions to avoid becoming victims of the criminal. He looks for things to do, for conditions to check, and for tasks to perform, between assignments.

Early in his career each officer must clearly understand that he will never fully accomplish total prevention, even when aggressive preventive patrol makes the risk for the criminal considerably higher. The awareness that this is an unattainable goal does not stop the professional officer from fully devoting his energy to as much prevention as is humanly possible. For example, it is increasingly apparent that at least 50 percent of auto thefts could be prevented, if people would lock their cars, would remove the keys, and would place their ignition in *lock* instead of *off*.

The Image of Constant Presence.

Desire and *opportunity* are the two basic preliminaries to crime. Patrol cannot effectively frustrate or eliminate the desire; the desire can perhaps be put off or diminished, but it can never be completely stifled.

However, the tactics of patrol do work against the opportunity. Such patrol requires continuous devotion to duty and a consciously vigilant observation of persons and property, not mere responses to radio calls or citizen complaints. It invites active movement, not passive waiting. Patrols should create an image of constant presence to combat the opportunity to commit crime with any telling result.

For the most part, patrolmen are better employed when their person and equipment are highly mobile, readily available,

and often seen. Good patrolmen usually recognize that the absence of crime and disorder is the best evaluation of police effectiveness, not the arrests or convictions with which the department may be credited. Accordingly, they engage the passerby in small talk, and friendly conversation; they walk the beat or cruise frequently, but irregularly pass the same houses, stores, business places, and alleys; they park their cars and motorcycles openly on the city streets.

The principle of *proportional distribution* or *selective enforcement* of the patrolling force is basic to good patrol. These are techniques which require measuring the need for police services relative to both time, place, and incident. The force should be apportioned on the basis of a *crime index* derived from data collected over an extended period.

The patrol force, however deployed, needs to be visible. It needs to be a constant reminder to citizens of the help and readiness of public service; of the protection of the law against injury to life, liberty, and property; of the concern and vigor of law enforcement action in behalf of the victim and society for the offense of the criminal.

Developing Information

One of the chief functions of the patrol officer is his need to promote information. The officer primarily seeks information useful to the agency he represents, information of many kinds and from many sources. However, he also seeks information useful to other law enforcement agencies -- about inoperative traffic lights, drug smuggling, roadway potholes, or odd smells of gas. He looks for information useful to private businesses -- about unprotected windows too near the street level, or open building lobbies unattended at night. He also tries to find information useful to householders -- about sidewalks dangerously uplifted by tree roots, or about an open and empty garage or refrigerator.

An officer's principal concern is the need of his agency for information which might be used to prevent or solve criminal actions. He interviews many persons and follows all the leads conscientiously, trying to meet and to know particularly those individuals who seem in good position to give specialized information. The development of sources of information and confidential informants is an important and sophisticated function of patrol.

Service Functions of Patrol

Many of the service functions of patrol, and such matters as evaluation of physical security of stores, offices, and vacant

residences have already been mentioned. In addition to these, the urban patrolman spends approximately two-thirds of his effort on non-criminal services.

Among these services, disturbance calls are the most numerous. Other services have to do with barking dogs, fires, lost property, missing persons and runaways, child births, strokes and deaths, and such information as the nearest good restaurant, lodging, or freeway.

Disturbance Calls. These calls are extremely difficult to deal with, often requiring the expertise of the psychologist or sociologist, as well as the functions of a lawyer, physician, and nurse. Moreover, they can be dangerous, often the most dangerous police activities.

Disturbances may be categorized as civil disputes, family disputes, street fights or group disorders.

Civil disputes - In civil disputes, the quarrel might concern a disagreement between neighbors about a land boundary; between tenant and landlord about taking property for non-payment of rent; or between customer and merchant regarding the repossession of household goods or car. In such cases, the officer's duty is to restore order and to keep the peace, while carefully maintaining neutrality in seeking the full development of the facts. Usually, in the absence of clear-cut crime, the officer may suggest the need for legal advice.

Family disputes - Family disputes are often unpleasant to the police officer. They involve the privacy of the family, the frequent trivial nature, the combustible emotion, the possibility that anger may be redirected at the officers themselves, the chance that someone may use personal weapons. All these considerations combine to rank domestic disturbances among the more sophisticated of the numerous non-criminal services assumed by the police. *Tact, patience, and wide tolerance of heavy abuse are the indispensable attributes of patrolmen in instances of this kind.*

Street fights and group disorders - These calls require quick attention to avert injury or even fatality. In a street fight -- between two persons -- the officer should intervene at once. One of the fighting participants may be a criminal, the other his intended victim. Immediate efforts, however, should be made to call for assistance, preferably, official assistance.

In a disorder involving a group -- defined perhaps as three persons or more -- the officer should exercise caution, and wait for additional assistance or other aid, depending upon the size of the groups involved. If the disorder persists, the officer and his fellow officers may have no recourse;

they may need to use force and effect an arrest.

At the scene of a disturbance - The patrolman's first responsibilities at the scene of a disturbance are:

- to ascertain whether anyone has been injured and if so, to provide immediately for his care, and

- to calm the disputants. Sometimes the appearance of the uniformed officers may serve somewhat to reduce the tension.

Emergency Service

In general, the police service for emergencies, such as auto injuries, cases of poisoning, burns, heart attacks, drowning, child-births, etc. should be strictly limited to first-aid measures, and speedy transportation of the injured to a doctor or hospital. Preferably, the transportation should be by ambulance.

THE REGULATION OF THE PUBLIC CONDUCT

The police, charged with the burden of community security, have customarily used certain regulatory devices to promote peace and order when stress or confusion occur. Such stress or confusion might accompany a parade, or a fire; undue auto traffic at rush hour; a gushing water main; or a crowd at a sporting event; etc. Police services designed to cope with these emergencies range from motorcycle escorts to emergency orders banning the use of some buildings or streets.

The assumption by the police of such authority, however, and of the power to implement that authority, is sensitive and should not be used unless an emergency exists. In general, non-criminal services by the police, despite their number, differences, and sometimes controversial nature, are not often clearly defined responsibilities.

Normally, they are sanctioned by custom. Public endorsement is present, but the public good will can be fickle. The American people are jealous, not only of their right to privacy, but also of their right, when they move non-criminally, to move freely. They submit to infringements on their public liberty for only limited periods and usually with reluctance.

Enforcement of the Law

For patrol officers, the chief categories in enforcement of the law consist of field interrogation, accident investigation, crime scene protection and investigation, and the tasks of

arrest, search, and seizure.

Field Interrogation. This has become a seriously controversial enforcement technique within recent years. It has a long accepted history in police circles as a device which prevents crime. It is also helpful in the development of information about crime and about persons with criminal records and associates. However, it is a technique that has been often abused.

Field interrogation should generally be conducted only when an officer has reason to believe that a person is about to commit a crime or has committed a crime; or that a crime has been committed, and he has knowledge of material value to the investigation. Field interrogations should not be used to harrass persons whom the patrolman may think have been dealt with leniently by the Courts. Likewise, they should not be used to challenge individuals whose appearance or dress does not conform with the policeman's ideas of what is best.

Accident Investigation. The purpose of automobile accident investigations may be either *operational* or *administrative*.

The operational purpose is to assemble the evidence regarding the accident and the cause, and to charge a violation of law if there appears to be any.

The administrative purpose is to identify hazardous conditions for correction, and to identify the violations which are most likely to cause accidents requiring future enforcement. They also have the purpose of identifying the age, occupational, and residential groups which are most accident-prone. This is done as a means of instituting educational or enforcement programs which may eliminate the cause of such accidents.

The Crime Scene

The patrolman should approach the crime scene with immense care. Statistics suggest that a very frequent reason for police fatality is the robbery-in-progress call. The patrolman, when he does not know whether the criminal may still be at the scene, should exercise extreme caution.

If the criminal has left before the officer arrives, the usual priorities of the patrolman at the crime scene are, so far as the officer is able:

- minister to the dead and wounded;
- verify the commission of a crime -- by interviews, records, and physical evidence;

- identify the criminal(s);
- ascertain the criminal's whereabouts; and
- apprehend the criminal(s) -- if the developed facts justify a legal inference of probable cause.

The preliminary investigation by a patrolman at the crime scene is the first step in the resolution of the crime. In this event, the patrolman should carry his investigation as far as he is capable within his bounds of jurisdiction and time.

THE TECHNIQUES OF PATROL

In general, the techniques of patrol may be divided into *random patrol* and certain *specialized patrol* arrangements.

Within *random patrol*, the basic foot patrol can be distinguished from motor and animal patrol.

Within the scope of specialized devices, there are a variety of both large and small organizational groupings, ranging from tactical units, stakeouts, and road blocks; to rescue teams, and strike, crowd, and riot control forces. There are other specialized dispositions: for instance, public police lectures on gun safety or protection against shoplifting, or police displays in store windows and the lobbies of office buildings.

Foot Patrol

There are advantages and disadvantages in foot patrol. Advantages could include:

- an increase in person-to-person contact,
- increased familiarity with physical surroundings,
- increased anticipation of difficult incidents,
- increased chances of information sources, and
- availability of police service for low priority calls.

On the other hand, disadvantages include:

- restricted coverage and mobility,
- restricted physical resources,
- restricted communication,
- restricted pursuit potential, and
- decreased supervision.

The prevailing view suggests that the walking patrolman should be confined to congested high-crime urban centers, to commercial

areas, and to intersections and street obstructions needing immediate traffic control.

Motor Patrol

Squad cars and unmarked cars are only one aspect of motor patrol. Other motorized equipment embraces specialized apparatus ranging from motor bikes, aircraft, helicopters, and boats, to one-door vehicles useful in chalk-marking tires for parking enforcement.

Patrol cars, equipped with distinctive colors, markings, lights, size, speed, and mobility are the best preventive patrol. In addition, they protect the officer from traffic and inclement weather; they act as potential barricades against gunfire; and they carry large supplies of useful gear, such as shotguns, fire extinguishers, rain wear, oxygen masks, department manuals, etc. They also carry additional manpower and prisoners, if needed.

Patrol cars are professionally regarded as extensions of foot patrol, and as motorized transport of the beat patrolman from place to place. Their larger areas are still adjudged beats, and it is still important for the patrolman to occasionally leave his vehicle, and patrol for short distances on foot.

Animal Patrol

Dogs and horses, intelligent and domesticated, are the two animal species most law enforcement agencies use, when they use animals at all.

In recent history, dogs were probably first used in formal police work at the turn of the 19th century. Dogs may be employed for tracking work, that is, the search for, and trailing of the fugitives or prowlers, and the smelling-out of narcotics, or they may be generalists. In some instances, well-trained police dogs can actually assist the officer in making the arrest.

The success of the *canine corps* is difficult to determine. Some cities, after experimentation, have abandoned their use, Other cities, however, have begun such units. Dogs generally have been given larger and larger roles in police functions.

The use of horses, on the other hand, has declined somewhat in police work. Although the London police still use horses for crowd control, they seem to have been generally abandoned by United States patrol forces, except in those instances involving bridle paths. However, some county sheriff's departments and federal law-enforcement agencies still utilize horses for

specialized tasks, such as patrolling rugged terrain in wilderness areas, or conducting Customs Service functions at International boundaries.

It is generally agreed that the use of animals is highly specialized, while their use in the general patrol function for most municipalities is not economical. The additional problems of public fear and attitude toward a trained beast serve to compound the issue to such an extent that the use of animals is relatively limited.

STUDENT LEARNING ACTIVITIES

- Observe pictures on films of police apprehending a criminal, for example, *The Policeman and His Job*, and report on the actions observed.
- Describe what an officer should do when arriving at the scene of a crime.
- Make a list of the activities that occupy much of an officer's duty-time.
- Describe the advantages and disadvantages of foot patrol and motor patrol.
- Take field trips to different agencies and question commanders and patrolmen about their duties and responsibilities.
- Collect articles about patrol and related fields.
- Listen to tapes of experienced employees of the Criminal Justice System (i.e., tape of police dispatcher calls on a busy weekend, or tapes of the training officer of the local police department).

TEACHER MANAGEMENT ACTIVITIES

- Show films on police work, for example, *The Policeman and His Job*, and *Traffic Patrol - Its Nature and Purpose*.
- Arrange for students to accompany police officers during their patrol activities.
- Ask a police officer to discuss preventive patrol measures, and describe the training that officers receive.
- Invite representatives of local, county, state, and federal law agencies to describe opportunities, entrance requirements, training, and job responsibilities for their agencies.
- Ask students to write an actual police report on a simulated criminal activity.

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Unit 4

INVESTIGATIVE TECHNIQUES

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Unit 4

INVESTIGATIVE TECHNIQUES

INSTRUCTIONAL OBJECTIVES

1. Ability to explain the basic principles upon which various types of police investigations are based.
2. Ability to describe the importance of the preliminary investigation.
3. Ability to understand the major steps in the preliminary investigation.
4. Ability to identify basic techniques and procedures used in police investigations.
5. Ability to recognize the precautions to be taken in protecting the crime scene.
6. Ability to appreciate the importance of taking field notes at the crime scene.
7. Ability to value the principles of investigative techniques in police work.

CONTENT

INTRODUCTION

The basic functions of police are to maintain peace and to protect lives and property. When a crime or accident has occurred, the police must investigate the circumstances and bring the violator before a court of law. Investigation of a criminal or traffic accident, which leads to detection, apprehension, and conviction of a law violator, prevents this person from committing other violations. It also provides information which helps the police to be more efficient in the prevention of future crime or criminal acts.

TYPES OF INVESTIGATIONS

The police officer or police aide is concerned with three basic types of investigations:

- Law and ordinance violations, which involve violations of criminal law, the traffic code, health regulations, sanitary codes, etc.

- Personnel investigation, to determine a person's character, background, and suitability for a position of trust or high responsibility.

- Conditions or circumstances which cause or may result in crime or an increase in crime; such as, studies of the effects of community facilities and programs upon juveniles, the effects of poverty, or investigations into organized crime and vice.

Any investigation involves the task of obtaining information, which is then evaluated, examined, and screened before it is used in a court of law as evidence. Much information obtained by police, such as tips, rumors, or polygraph (lie-detector) tests, etc., are not appropriate, suitable, or legally usable in a court as evidence. However, this kind of information can be of great value in obtaining other information which can eventually be used as evidence.

Sources of Information

There are two sources of information -- people and things. The gathering and evaluation of each type of data calls for special types of skills and talents.

The officer at the crime or accident scene deals with people who are usually in a highly emotional state, and frequently faces problems of perception, communication, and possibly fighting or fleeing.

The laboratory technician or scientist deals with objects which cannot lie or flee, or are not emotional. These must be handled and examined in special ways by a person possessing definite types of training and experience.

However, the officer at the scene still must know what to look for, and what may be of value both to the technician and/or the court as evidence.

People as Information Sources. *People, as victims*, can supply information because of their direct observations and personal experiences. They may be able to:

- identify the criminal offender;
- provide a description; and
- indicate the direction and method of flight, the method of operation, things to search for on a suspect, the suspect's motives, etc.

Witnesses to a crime or accident may be able to describe:

- what was taken;
- what the violator said, did, touched, etc.;
- the sequence of events; and
- to what extent and in what manner the scene was altered.

Witnesses may also provide information through "hunches" or ideas.

Offenders or violators, through their observations and personal experiences,

- may be willing to provide investigators with facts which supplement the information given by victims or witnesses,
- may provide motives,
- may involve other persons,
- may offer alibis,
- may locate stolen property, or
- may provide information on other offences.

Physical Objects as Sources of Information. Physical objects are the other main source of information.

Because people are capable of lying, perceive things differently, can be impeached, and have faulty memories, courts have established that physical evidence, scientific tests, or objects are of greater value as evidence than human descriptions.

Every officer should be aware that every crime or accident results in either physical changes or transfers of materials which may later be verified:

Physical Changes. Physical changes may occur in the *victim's* condition through:

- injuries caused by weapons such as a gun, club, or knife;

- through chemicals such as poisons, acids, or drugs;
- through impact with a vehicle which results in loss of blood, skin, clothing; etc.

The *suspect's* condition can be changed:

- by injuries caused by a fight with the victim, as indicated by scratches, bruises or bites;
- by contact with other objects resulting in cuts, falls, or broken bones, etc.

The *scene of the offence* may be changed:

- by broken objects, such as windows, doors, headlights, bumpers, etc.;
- by marked or dented objects, such as windowsills, wet paint, soft putty, earth, etc.;
- by things which have been moved, such as windows, furniture, curtains, etc.; or
- by objects that have been destroyed, such as serial numbers, burned buildings, etc.

Transfer. Materials may also be transferred or moved by the suspect from the victim or the scene. These may include property of the victim, tools, blood, hair, clothing fibers, etc. Additionally, items such as bullets, tools, cigarette butts, paint peels from an auto accident, matches, fingerprints, etc., may be either left at the scene accidentally, or taken by the suspect.

Preliminary Investigations

Criminal investigations are conducted to obtain physical evidence, or to apprehend the suspect or suspects. This evidence is then presented to a court of law. Much of the success of these investigations depends on the actions of the police at the time that they become aware of the crime and when they first reach the scene. *The initial actions of the officer can well determine the success or failure of the investigation.* The early discovery of facts, information, and objects; and the protection of these items and the general scene until the follow-up investigator takes over, is called the *preliminary investigation.*

Purpose. The purposes of the preliminary investigation are:

- to establish a basis from which a follow-up investigation

can be made,

- to provide prompt first-aid if needed by the victims of a crime or accident,
- to apprehend the offender, and
- to show that the police can and do respond efficiently.

The Scene. This preliminary investigation consists of a number of related activities.

Prompt Arrival. Police efficiency in an investigation is frequently measured by the speed and attendant safety of the officer's response and arrival at the scene of the incident. This is particularly true in criminal cases, as the opportunity to offer medical assistance or apprehend a violator decreases rapidly with passage of time.

The officer should proceed to the scene immediately in a safe manner, avoiding reckless driving which may cause danger to others, or accidents which may delay the officer's arrival. Quick arrival at the scene is particularly important in cases of serious auto accidents, or crimes where someone may be injured from a shooting or stabbing, and where prompt administration of first-aid may save a life or permanent injury.

Prompt arrival also:

- greatly increases the opportunities for apprehending the violator;
- lessens the chances that evidence will be destroyed or altered intentionally or innocently by by-standers; it also
- lessens the chances that witnesses will leave the scene, have decided not to cooperate or tell their observations, have discussed the event with others and thereby distorted their views, or became confused as to what they actually saw.

Initial Action. If the officer is accompanied by another officer or aide or if other persons are at the scene, the officer may try to apprehend the suspect or suspects while the other officer or aide provides assistance to the victim.

The top priority of the officer arriving at the scene is to preserve and protect human lives which may be endangered.

The officer may have to call for an ambulance, administer first-aid, or take the victim to a hospital, depending on the situation.

The officer then attempts to arrest the violator or offender if a crime has been committed. He must evaluate the situation by asking questions of the complainant, victim, and/or witnesses. He must observe the general physical scene, and look for traces of evidence such as tool marks, weapons, or forced windows.

Witnesses. The officer should attempt to quickly determine exactly what happened, but should not take accounts of witnesses at face value. Citizens have been known to claim criminal damage or mischievous conduct when actually damage was the result of a self-committed accident.

If the suspect is not at the scene, the officer or aide should obtain as much basic information about the suspect as possible and notify other police units in the area. This information might include:

- a physical description;
- known identification;
- the suspect's destination or direction of flight; and
- the make, year, color, license, and number of persons in the suspect's vehicle.

This information should be broadcast on the police radio immediately to assist other police units:

- who may be in a position to apprehend the suspect or suspects,
- who may stop them by chance on a routine traffic violation, or
- who may know where the suspects are going as a result of information furnished by a victim or witness.

The officer and aide conducting the preliminary interview should try to obtain, in the most rapid manner, as much relevant information as possible. Probably the complainant, who possibly knows the most about this problem and may have been in actual contact with the criminal, is the first one to be interviewed. Eye-witnesses to the crime should be interviewed next. Following this, the officer should interview other persons who may have information about the crime, accident, or events leading up to it.

If the suspect is already in custody, he must first be informed of his legal rights. Only then can a suspects testimony be used against him. Questions relating to the identity of other suspects and the admission of guilt can then be asked. The

officer should try to calm the victim or victims, and any witnesses who may be hysterical, angry, in shock, violent, etc. Witnesses should be interviewed separately so that their accounts of the incident will not influence the accounts of other witnesses.

Except when it is necessary to provide first aid or to apprehend a suspect, the officer should not disturb nor allow others to disturb the scene of the crime or accident. Until an examination has been made of the scene to determine the extent of the crime, all persons should be kept away so that sketches, photographs, casts, etc., can be made.

Investigation Reports. After taking care of the scene of the incident, the officer and/or aide should begin taking notes of all information relating to the incident. A record should be made of such items as:

- Time of arrival of police at the scene,
- Weather conditions,
- Time of probable occurrence of the incident,
- Identity of other officers involved, if any,
- Time when incident was known to police,
- Results of interviews,
- Identity of victims, suspects, and/or witnesses,
- Any other relevant information.

The crime or accident should be reported on police departmental forms, and in as complete and accurate a format as possible. The officer must also arrange for the collection of all possible evidence, either personally, or by police laboratory technician, detective, or other person assigned to this responsibility.

The preliminary investigation is completed when the officer and/or aide turns over all the information obtained to the detective or other investigator who has been assigned to do a more detailed and in-depth investigation of the incident.

ACCIDENT OR CRIME SCENE PROTECTION

Importance of Protection

Protection and preservation of the scene of the incident until the investigation is completed is an important responsibility of the police officer. In fact, the success of the investiga-

tion frequently depends not only on the officer's prompt arrival on the scene, but also the thoroughness of the preliminary investigation. If the scene is changed to any degree, information leading to the apprehension of the suspect may be destroyed, lost, or made unusable. Firm evidence may also be changed to an extent which would make it unusable in a court.

As previously indicated, prompt arrival of the officer and aide at the scene is very important. It often makes the difference between obtaining clear and conclusive evidence, or having to conduct a lengthy, involved, and perhaps futile investigation. If the officer is slow in arriving, wind or snow may cover footprints, rain can dissolve bloodstains and fingerprints, or glass or paint chips may be swept up or thrown away. Other kinds of evidence may also be obscured, further injury or destruction may be caused, and witnesses may become lost.

Definition of Crime Scene

The accident or crime scene is the location where the accident, crime, or other incident took place, or where any acts relating to the crime occurred; and is the place from which the investigation begins.

Procedures

The first officer to arrive at the crime scene is usually the patrol officer, who is responsible for securing and protecting the specific place where the crime occurred.

When secure, the officer then extends his control outward from the scene into nearby hallways, parking lots, and areas adjacent to the roads or walks near a vehicle accident. The cfficer and aide must provide continuous protection for this area until the arrival of detectives, laboratory technicians, and other investigators.

The officer must also keep anyone not directly involved in the investigation away from the scene, including reporters, other police officers, witnesses, and even the owner of the premises.

The officer must not touch, handle, step on, or alter in any way anything that might even remotely be connected with the suspect. Traces are often left of footprints, tire marks, or ladder marks or impressions; by tools scoring or damaging doors, windows, safes, or cabinets; by used bullets which can be traced to a specific gun; of broken glass which can show the direction of impact; or of blood and stains that can be matched with the suspect or victim.

SPECIAL PROBLEMS

Fingerprints

Physical forms of evidence are becoming increasingly important in courts to offset the questioned validity of verbal statements. The most important piece of evidence that an investigator can obtain is fingerprint evidence. This is true because every fingerprint is different, and only one person can make a given print. Fingerprint evidence establishes without a doubt that a unique suspect was at the scene of the crime.

Fingerprints are markings left on a surface, and have the same pattern as the skin of the hand making them. There are three types of fingerprints:

- *Latent prints, or prints formed by perspiration or skin oils.* These are normally not visible and must be treated by dusting, fuming or chemicals to be collected. The term *latent* is often applied to all types of fingerprints.

- *Visible prints,* These are prints resulting when a finger has been covered with blood, oil, dirt, or some other substance which is then transferred to a surface.

- *Plastic or moulded impressions,* or prints made when a soft surface such as putty, wax, soap, butter, grease, etc., is touched, and a finger leaves an impression in the surface.

Fingerprints theoretically last indefinately on a surface, but their practical value is lost after several days, due to evaporation of the moisture in the impressions. Rain or snow can also destroy prints in a very short period of time; a hot sun will dry them out in minutes; and wind will speed up the deterioration. Prints left on a smooth surface such as metal, glass, or tile will last longer than those on a porous surface such as paper, rough wood, or fabric.

Police look for prints:

- on furniture which has been moved;

- on ash trays or lamps that may have been thrown out;

- on points of entry, such as window sills, panes of glass or door jambs;

- on dressers, desks, and tables; or

- on tools and weapons left at the scene.

Bloodstains

Blood may be found on the victim, the suspect, at the scene, or on a weapon. This blood may, by laboratory analysis, be shown to be the same type and can be part of the evidence being developed. Unlike fingerprints, however, many persons have the same type of blood.

Bloodstains or smears on doors, furniture, and floors can indicate movements and help to reconstruct the crime, and the shape and position of the stains may show the position of the attacker or how a weapon was used.

Bloodstains take on many colors, and a sharp eye is often needed to identify them. A thin layer of blood can appear to be greyish-green, while exposure to sun, heat, or water can cause it to appear grey. Blood on wallpaper may change the color of the paper dye, while wine or coffee may discolor it differently. Some other stains such as paint, lipstick, or rust may appear to be blood, and chemical tests are needed for identification.

The officer usually searches for bloodstains in cracks or wall seams which appear to have recently been washed; under furniture; around kitchen sinks, laundry and bath tubs, or toilet bowls; on soap, soap dishes, curtains, bedding, and towels; and on clothing.

Tool Marks

Tool marks are imprints made by an instrument on a surface or object which is softer than the tool. Tools such as a screwdriver, hammer, or crow bar have certain grain characteristics in the metals that are unique to that tool, as a fingerprint is unique to only one person.

Tool marks can be readily seen under a microscope, and markings left at the scene of a crime may often be traced to a particular tool. Tools leave three kinds of marks:

- Impressions or indentations, as made by a sudden blow,
- Striations or scratches, or
- Combinations of the above, which are the most common kinds of marks.

Police look for striations on cash boxes, cash registers, door locks, and safe dials. Impressions are usually found at points of entry.

Because tool marks are important as evidence, every effort should be made to locate the tool. Tools also may leave paint flakes, oil, or dirt, or may pick up wood or dust fragments at

the scene.

INTERVIEWS

An investigating officer must obtain as much information as possible, so that the facts, the sequence of events, and the identity of the suspect can be determined.

Interviewing is the conducting of a controlled conversation with a victim, witness, or anyone else holding information about a crime, incident, or situation, who offers this information willingly.

Interrogation is the process by which police attempt to obtain information about a crime or incident from a person who is unwilling to give information. This person is generally the suspect, but may also be a witness or victim.

Before interrogating a witness, his legal rights must be read to him, and he must understand them.

Basic Principles

The best time to conduct an interview is usually as soon after the incident as possible, so that memories are sharp, and witnesses have not been influenced by others.

Delay sometimes occurs due to emotions, the situation, or weather conditions. The interview should be held in privacy, and free from distractions.

The officer should try to improve communication by removing physical and psychological barriers such as a desk or counter, and to prepare for the interview by knowing as much information as is available about the case, and by acting in a friendly, cooperative, and professional manner.

Techniques

The officer should begin by finding some way of establishing a friendly relationship with, and interest in, the subject. Patience and courtesy are most essential.

Even with a hostile subject, the officer should try to discover the reason he is hostile or reluctant to talk. He can do this by showing friendship or by appealing to justice or reasonableness.

It is essential that the officer listen and keep his own talking to a minimum. Subjects should not be interrupted

while talking.

Officers must not be overbearing. The subject should be allowed to carry the conversation as much as possible, and should be encouraged to tell his story in his own way.

Specific questions can often be used to clarify a point or to get a subject talking. The officer should continually evaluate what the subject says, how it is said, and what is not being said.

If silence, a quick shift in topics, or emotional outburst occurs, the officer should calmly and discretely attempt to learn why. Leading questions often confuse, and disturb the subject and are generally to be avoided.

Witness Errors

Many things influence the way a person sees or thinks an event or incident occurred. The officer or police aide needs to be aware of these factors and the manner in which they may distort information.

Factors such as light, weather conditions, noise, smells, smoke, distance from the incident, etc., can greatly affect or distort a person's impressions. Likewise, the passage of time, or other outside influences may make a difference in memory retention.

Physical conditions such as age, perception, nearsightedness, hearing, taste, illness, or disease may affect a person's honest ability to relate his impressions.

Emotions must also be considered. These include reactions from those who may be frightened, excited, angry, etc., and who may unconsciously offer a narrow and biased type of information. Severe emotional reactions may even cause a temporary loss of memory.

In general, the more familiar a person is with what is being observed, the more capable he is of describing it; and the better educated he is, the better is the description.

Persons tend to see or hear what they want to see or hear, and may consciously or unconsciously slant their descriptions because of these biases. That these natural sources of error happen should be known to and evaluated by the officer or police aide as information is being gathered.

FIELD NOTES

Field notes help the officer to recall basic information and events. They help to clarify inconsistencies in stories, suggest new ways of questioning, and help the officer to recall items which may be forgotten in the excitement of the incident scene.

These notes can also help the interrogating officer if the investigative report is not fully completed. They can aid in briefing the officer on the facts learned up to this point of the investigation.

Field notes assist the officer's recall when he later appears in a court of law. They can help a witness to recall what was said at the time of the incident, and in turn counteract changed testimony or later denials.

The officer should take as many notes as practicable, so that information is accurate and will not be forgotten. Some police departments are requiring officers to carry small portable tape recorders at all times. The officer is then able to record his conversation and the conversations of witnesses, suspects, etc.

Incomplete or inaccurate notes may be used in court to discredit the testimony of the officer or police aide. The notes should be legible, relevant, and completely referenced as to time, location, incident, etc.

Most of the officer's notes will result from interviews, but other types of information, such as court appearance dates, special events, descriptions of suspects, stolen property, wanted persons, or special conditions, should also be included.

STUDENT LEARNING ACTIVITIES

- Review accident or crime investigation reports used by a local police agency.
- Expose fingerprints to rain, wind, and sun, and determine which climatic condition causes the prints to deteriorate most rapidly.
- Place fingerprints on differing surfaces, such as wood, metal, plastic, or cloth, and compare the stability of the print over a period of time.
- Outline the kinds of information usually compiled in field notes by an officer and describe these in general terms to the class.
- Write a report which describes the duties and responsi-

bilities of various police jobs, such as investigator, laboratory technician, criminologist, detective, and patrol officer.

- Describe various ways in which the police agencies in the community, county, or state cooperate.

- View and discuss films on investigative techniques, as for example, *Fundamentals of Criminal Investigation*, and *The Nuclear Witness: Activation Analysis in Crime Investigation*.

- Debate statements such as, *There is no such thing as a routine arrest*, or *Protection of the crime scene is not a very important function of police work*.

TEACHER MANAGEMENT ACTIVITIES

- Show pictures or video tapes of a crime or accident scene to the class, and lead a discussion on the next steps to be taken by the investigating officer.

- Create a bulletin board display of copies of investigative report forms of various police agencies.

- Demonstrate to the class the procedure used in fingerprinting, and allow students to take each other's fingerprints.

- Arrange for a class role-playing interrogation interview.

- Ask students to write reports on topics such as:

  the importance of the field report,

  the value of fingerprints,

  protecting the scene,

  procedures in interviewing witnesses, or

  sources of information and their value.

- Show and discuss films on investigative techniques, as for example, *Fundamentals of Criminal Investigation* and *The Nuclear Witness: Activation Analysis in Crime Investigation*.

- Allow the students to debate such statements as *There's no such thing as a routine arrest*, or *Protection of the crime scene is not a very important function of police work*.

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Unit 5

TRAFFIC DIRECTION AND CONTROL

Here are the contents for Unit 5 of the Public Safety Group. We suggest a careful reading of it before you read the text.

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Unit 5

TRAFFIC DIRECTION AND CONTROL

INSTRUCTIONAL OBJECTIVES

1. Ability to understand how to enforce the traffic laws and regulations.
2. Ability in role-playing situations to demonstrate proficiency in traffic control at intersections.
3. Ability to recognize the importance of working with traffic engineers, educators, and motor-vehicle administrators to regulate and improve traffic flow.
4. Ability to describe the proper investigation procedures at an accident scene.
5. Ability to report evidence, inform violators of their rights and responsibilities, and make an accident scene as safe as possible.
6. Ability to value the importance of traffic direction and control as a primary police function.

CONTENT

INTRODUCTION

This unit is designed to develop the student's ability to understand, and to appreciate the basic duties of a law enforcement officer, as these duties relate to improving the safety, direction, and control of traffic. It will provide knowledge of controlling traffic flow, and familiarity with and reasons for traffic regulations. This unit will also deal with methods of handling traffic law violators, and investigating, reporting and controlling accident scenes.

THE TRAFFIC OFFICER

Traffic police are normally assigned to a beat or area to patrol by foot, patrol car, motorcycle, or horseback. Their primary function is the safe control of traffic in their area by preventing accidents and improving the flow of traffic.

They are expected to know and enforce the traffic laws and regulations, and to issue tickets for traffic law violations.

They must report to the scene of an accident, and render first aid to any injured persons. It is part of their duty to investigate the causes of, and results of, an accident, and to direct and reroute traffic around the accident scene.

Other duties include traffic control in unusual crowd situations, such as fires, construction sites, or other types of disruptions to normal traffic flow.

The traffic officer writes daily reports describing his activities.

Accident prevention officers investigate traffic accidents to determine the cause and, from information obtained, formulate plans for the regulation of traffic and education of the public to prevent future accidents. Officers photograph the accident scene. They obtain statements from those involved and from witnesses to the accident. In addition, they take measurements, and obtain other evidence that may determine which party in the accident is at fault.

INTERSECTION TRAFFIC CONTROL

Need for Control of Traffic at Intersections

Because of the large volume of traffic on American streets and highways, the threat of congestion or traffic tie-ups almost always exists. Usually, traffic signals are used to control the routine flow of traffic, but frequently conditions arise that do cause congestion. These causes may be such incidents as parades, accidents, rush hours, special events, athletic contests and fairs, non-operating traffic signals, etc.

Officers are often assigned to direct traffic as a means of relieving this congestion and keeping vehicles moving. The traffic officer must be prepared to go to the scene of the congestion, and must know and be able to use the basic techniques and signals that are most clearly understood by the general public. These skills include proper bearing, attitude, and appearance of the officer.

The officer directing traffic at a busy intersection probably has the most frequent contact of the entire police force with the general public. His ability to handle the situation and his efficiency on the job are the impressions that many of the public have of their police. For these reasons, the officer must always be conscious of the image he portrays, and must be and appear to be, a professional whenever on the job.

Preparation for the Task

Special Clothing Requirements. The traffic officer needs to be ready to direct traffic as a routine part of his job. He must remain at his post for many hours and in all kinds of weather. Protective clothing such as a raincoat, cap cover, gloves or mittens, and other suitable clothing, therefore need to be available at all times. Officers in patrol cars usually carry these clothing items with them, while officers on foot usually arrange to keep extra clothing in an available business place.

Despite the fact that patrol cars have heaters, officers often remain outside of their cars for long periods in winter. They need to have proper protection against the cold, such as high visibility gloves, cap covers, and a slip-over vest. High visibility clothes should be worn at night. A wet, cold, or improperly dressed officer is a hazard to himself and to motorists.

Position in the Roadway. The position selected by the officer to direct traffic depends on:

- the design of the particular intersection.
- the direction of traffic flow.
- having a clear and unobstructed view of the intersection and its approaches.
- being positioned where motorists can easily see the officer.

This location should allow for supervision of all vehicle and pedestrian movements. Officers assigned to traffic control usually select a position in the center of the intersection or at one of the corners.

The center of the intersection usually gives the most visibility, but is also the most hazardous place to stand. It is normally selected when traffic signals are not working, when traffic is not moving at high speeds, and when there are not many pedestrians crossing.

The intersection center is not used when the officer must stand in the path of traffic, or if there is little clearance between opposite flows of vehicles.

Control of traffic from a corner of the intersection is used when there is heavy pedestrian traffic, or when the center is too dangerous for the officer. Usually, the officer stands in the street a few feet out from the curb.

The officer should stand erect and indicate command, and when not signaling should stand at ease facing traffic and with hands at sides. When directing traffic, the officer's shoulders should be parallel to the traffic flow.

THE TRAFFIC CONTROL FUNCTION

Hand Signals. The ability of the officer to use his uniform and posture, in conjunction with clearly defined and understandable gestures, is basic to traffic control. Complicated or unclear signals cause confusion, accidents, or traffic infractions, and should not be used.

To stop traffic, the officer:

- selects the vehicle to be stopped.
- looks directly at the driver and points directly at him.
- holds this position until he is seen by the driver, then raises the hand so that the palm is facing the driver.
- continues to hold this position until traffic is stopped, then, with one arm still raised, turns head in opposite direction and repeats this procedure with the other hand.
- lowers neither arm until all traffic is stopped.

To start traffic, on a cross street, the officer:

- pivots and places his shoulders parallel with the vehicle waiting to move.
- points to lead vehicle to attract attention.
- turns palm of hand inward and by bending elbow, brings hand up and over to the chin.
- repeats gesture until traffic starts to move, then drops hands to side.

Whistle. The police whistle should only be used when necessary, but then should be loud and clear. It can attract attention

and greatly assist in the control of traffic.

One long blast, together with the proper gestures, is used to stop traffic. Two short blasts are used to start traffic. Short, fast blasts are used to give warning of dangerous conditions such as turning vehicles, emergency vehicles, improper crossings, etc.

Regulating the Flow of Traffic. Police officers direct and control traffic to prevent congestion on streets and highways, and to increase the movement of vehicles in a safe manner. To do this, the officer at an intersection allows longer periods of traffic flow on the most heavily traveled street. If intersecting streets have the same amount of traffic, each street is allowed equal amounts of time for vehicles to move through the intersection. Generally, allowing longer amounts of time for traffic to flow on a street is preferable, as it reduces the amount of time lost from frequent changes of traffic direction.

Traffic should be stopped if it appears that it will back-up and block the intersection and prevent cross traffic. The flow of vehicles can sometimes be increased by signaling slow or timid drivers to speed up and remain in their lanes.

Double parking by delivery trucks or other vehicles interferes with normal traffic flow, causes safety hazards, and back-ups. This should also be prohibited.

Control of Turning Vehicles. The officer should supervise all turning vehicles. When traffic is exceptionally heavy and there is a spill-back or back-up from another intersection, turning vehicles often add to the congestion. At these times, the officer should direct all traffic to go straight ahead, preventing turns.

Traffic officers are expected to prevent all improper turns. Right turns from the left lane, or left turns from the right lane, are illegal and cause congestion and accidents. Assistance can be given to drivers by directing those making a left turn into the left lane, allowing the nearest approaching vehicles to pass, then stopping the remaining traffic and motioning the driver to turn.

Which lane of traffic takes precedence depends on which one has the greatest flow, providing there is space to permit the traffic to continue.

Traffic flow should be coordinated with other nearby intersections.

Pedestrians. Pedestrians need to be held on the curb until all traffic is stopped to prevent accidents due to inattentive

drivers, mechanical failures, etc. Special attention should be given to children, blind, lame, or elderly persons. Jaywalking or other illegal crossings by pedestrians should be prevented by sounding a warning on the whistle. In some states, pedestrians automatically have the right of way, once they are legally in a crosswalk.

Emergency Vehicles. All pedestrian and vehicle traffic should be stopped when an emergency vehicle is approaching. The officer should give the drivers *go* or *turn* signals when the intersection is clear.

Providing Assistance and Information. A street map or guide is normally carried by officers to assist persons needing direction. If detailed explanations are needed, the person should be directed to the curb. The officer should continue to observe traffic when providing such assistance.

Parking. The officer should issue a warning or *citation* (ticket) in accordance with local regulations when vehicles are illegally parked, parked overtime, double parked, blocking a fire hydrant, parking across a sidewalk or driveway, etc., or whenever a safety hazard is created. At times, vehicles must be removed or impounded.

TRAFFIC LAW ENFORCEMENT

The purpose of traffic laws and regulations is to discourage the kinds of behavior or conditions which cause accidents, inconvenience, or congestion, and to improve vehicle equipment and the habits of pedestrians. In turn, this improves the health and safety of the community.

Enforcement action is taken so that traffic laws and regulations can be reviewed by the courts, and so that the courts may evaluate the improper conduct and take appropriate measures.

Application of Traffic Laws and Regulations

Much of the ordinary contact between citizens and their police comes about as a result of traffic violations. Over 16 million summons are issued yearly for moving-vehicle violations in the United States, in addition to the issuance of over 30 million parking tickets. This appears to mean that the average driver is not able to operate a motor vehicle in compliance with all laws at all times.

Support for law enforcement objectives requires the interest and support of the community. This, in turn, is influenced by the way police handle traffic violations. Most violators do not consider themselves as criminals and resent a strict

enforcement of the laws.

However, allowing violations under some circumstances may tend to encourage violations in hazardous situations. Traffic officers should use discretion and exercise a degree of latitude in enforcement. Nonpunitive warnings and notices of violations should be combined with punitive sanctions, such as arrests or summons. A flexible enforcement policy will tend to minimize both the resentment of the public and the risk to public safety resulting from excessive enforcement.

Police officers must use good judgment and common sense in deciding when to enforce a traffic law. For example, some latitude in enforcement may be used when:

- double-parking does not interfere with traffic, and the driver remains in his car, or when trucks have no loading-zone facilities.
- when overtime parking is not excessive and does not inconvenience the public.
- for minor violations committed by out-of-town drivers.
- when speeding is not overly excessive or hazardous.
- when the vehicle has such mechanical defects as burned-out tail lights, of which the driver is unaware.

The Traffic Violator. The professional attitude shown by the officer or aide when dealing with a traffic violator requires objectivity, concern for the violator, and complete absence of any desire to harm, threaten, or punish the violator. The officer must remain calm despite abuse and provocation. This is essential to build respect for the law and law enforcement.

Persons who violate traffic laws represent a cross section of the community and, as such, are usually unable to admit their errors, including their bad driving. Most persons find it easier to blame mistakes on someone or something else. There is an emotional response and the implied threat of punishment as a result of being stopped for a traffic violation. This means that the officer or aide must be prepared to deal with a wide range of responses from mild anxiety, or hysteria, to personal accusations, verbal abuse, etc.

Issuing Tickets. Once the decision to stop the traffic violator has been made, the officer or aide must decide whether to issue a warning or summons. Aides do not normally take offenders into physical custody. The following procedure is usually followed:

- notify the police dispatcher by radio (if radio is available in police car) of your location and the violator's license number.
- check the license against the stolen car list (almost all patrol cars have such a list).
- politely greet the driver, and inform the driver that he was observed violating the law for yielding, illegal turn, etc., and of the action to be taken (summons, warning, etc.).
- request the driver's license and vehicle registration and check them.
- return to the curb or shoulder side of the car to write out the summons.
- check with the police dispatcher to learn if there are warrants or other reasons for holding the driver.
- give the violator a copy of the ticket, and explain what the driver is expected to do about it.

The Traffic Accident

The Accident Investigation. The causes of accidents are investigated by police to determine whether greater enforcement is required; to better understand traffic problems; and to form guidelines for traffic enforcement programs, traffic engineering programs, and traffic education programs. The investigator is expected to obtain as much information about the accident as possible, to keep an open mind until all facts are known, and to complete a written report of the findings.

Responding to the Accident Call. When directed to the accident scene, the officer should obtain as much information as possible from the dispatcher. This information should include type of accident, extent of injuries, location, traffic conditions, number of vehicles involved, etc.

If there are no injuries or other emergencies, the officer drives to the scene at a normal rate of speed and observes all traffic laws. If the accident is an emergency, then the officer drives to the scene as rapidly as safe emergency driving procedures allow.

Accident Scene. Upon arrival at the scene, the officer first tries to prevent the accident from becoming worse. After surveying the scene, the officer inquires about injuries and calls for assistance if needed.

If it is a minor accident, the police car is parked off the road and the other vehicles are moved from the road as soon as possible.

If a serious accident has occurred, the police car is parked on the road in back of the disabled vehicles. The emergency flashing lights are kept on during the entire investigation, as are other car lights if at night. Flares or reflectors are placed on the road several hundred feet behind the vehicles.

Treatment of Injured. Some injuries call for immediate first aid. Usually, the injured should not be moved until an ambulance arrives, as improper movement may increase or worsen the injury. If the victims can walk, they should be helped to the curb or to a vehicle, but not to the police car parked in the middle of the road.

Property Protection. The officer or aide should collect the personal belongings of the victims and give them to identified friends or relatives, or lock them in the police car. To prevent theft, bystanders should be kept away from the damaged vehicles.

The officer must guard the vehicles and sometimes have them towed away or impounded without the owner's consent if the driver is arrested or hospitalized. If the disabled vehicle is a traffic hazard, or if the vehicle was stolen or used in a crime, it must be removed from the accident scene.

The officer or aide should also prepare an inventory of items easily stolen from the vehicle, such as jack, spare tire, battery, hub caps, etc., and require that the tow-truck operator sign the inventory prior to allowing the damaged vehicle or vehicles to be towed away.

Investigation of Parties Involved. The purpose of the investigation is to obtain the facts from any and all sources and to determine the causes of the accident. After securing the area, officers usually begin their investigation by checking the validity of the drivers' operator's permits, which the officer holds for identification purposes until the investigation is completed.

The physical condition of the drivers is observed to determine whether they are injured or are under the influence of alcohol, drugs, etc. Each driver should be interviewed separately to learn his uninterrupted version of the cause of the accident. Some jurisdictions require that the drivers should then be asked to repeat their version of the causes of the accident in each other's presence. As points of contradiction arise, the officer or aide explains them to both drivers,

together with such clearly observable facts as road conditions, signals, point of impact, etc.

If the driver is missing from the scene, the officer should attempt to learn the reason before calling in a report of a hit-and-run driver. The missing driver may not have been able to find a parking spot nearby, and had to park at some distance; the driver may have been injured and taken to a hospital; he may have suffered a concussion and be wandering around the accident scene; or the drivers may have exchanged information and then driven away, which is in compliance with the law under certain conditions.

Investigation of Witnesses. Eye-witnesses to an accident often prove to be highly unreliable sources of information and frequently contradict one another. Nevertheless, the officer should attempt to gain information from all possible sources.

Usually, disinterested persons who were not involved in the accident are the most reliable witnesses. Many witnesses are reluctant to give information because they do not want the inconvenience of appearing in court. Witnesses should be interviewed as soon as possible as they tend to quickly leave the scene, particularly in poor weather.

Witnesses can be identified by observing persons doing a lot of talking and pointing. The officer should avoid using the word *witness* when asking the individual what he saw. *Investigators must use courtesy, tact, and patience when asking for the cooperation of a citizen who has no legal responsibility to extend himself.*

The most successful approach is to allow the witness to tell the whole story in an uninterrupted manner before asking questions about particular parts of it.

The officer should determine where all witnesses were at the time of the accident and what they were doing. As a rule, passengers in the vehicles involved in the accident are biased, but should still be interviewed.

Investigation of Physical Evidence. Physical evidence found at the accident scene is more reliable than the accounts of witnesses, as it cannot lie. Physical evidence is not prejudiced, and may offer many indications leading up to the accident.

The investigator should note the road condition (slippery, dry, holes, etc.); the weather; obstructions (construction, parked vehicles, traffic signals, etc.); and visibility (clear, fog, rain, darkness, etc.). Skid marks or tire tracks on the roadway can be used to estimate the speed of the vehicle and

the direction of travel. The exact point of impact can be found by dirt shaken loose, broken glass, or chrome pieces on the ground.

The condition of all vehicles involved should be evaluated, as the damage to them may indicate their position at the time of impact. The steering, brakes, and lights should be checked as possible contributors to the accident.

Reporting Evidence. The officer takes notes of all findings and adds sketches, measurements, and/or photographs when necessary. All findings are placed into the accident report.

Law Enforcement. A summons or other law enforcement action should only be utilized after the evidence has been evaluated, and the investigation has been completed. All parties should be made to understand their obligations to report the accident, appear in court, etc.

Removing Traffic Hazards. Issuing a citation or summons completes the investigation at the scene. The officer makes sure that all debris which may be dangerous to pedestrians or traffic has been removed.

STUDENT LEARNING ACTIVITIES

- While standing in front of a class, demonstrate the proper methods of stopping traffic at a busy intersection.
- Observe the actions of a police officer directing traffic at a intersection.
- Listen to a police officer conduct an investigation at an accident scene.
- Arrange with a police officer to ride in the patrol car so you can observe how he handles different situations. Prepare a report for the class describing this ride.
- View films on traffic direction and control, as for example, *Signals and Gestures in Directing Traffic*, *Protecting the Scene of the Accident*, and *Traffic Violation Case Preparation*.
- Observe a local street intersection and write a brief report on how traffic flow could be improved. Describe how this could be accomplished.
- Obtain a sample accident investigation report form from a local police agency.
- Inspect a police car and note the types of emergency equipment available.

TEACHER MANAGEMENT ACTIVITIES

- Arrange for the class to observe a local traffic court session.
- Assign the class a written report dealing with their impressions gained at traffic court.
- Arrange for selected class members to ride with police while on patrol.
- Show films of an accident scene to the class, for example, *Questioning Drivers and Witnesses in Accident Cases*, and *Detecting and Recording Skidmarks*, and ask students to note items that an investigator should include in the accident report.
- Conduct a role-playing session showing how eyewitness accounts of an accident can vary.
- Arrange for a police officer to discuss his role in local traffic control with the class.
- Show the class a picture of an accident scene and ask for their observations and impressions.
- Compile a file of forms used by various police departments to record accident reports.
- Compile a fictitious accident report form, and ask students to analyze it for completeness and accuracy.
- Ask a traffic engineer or city planner to discuss his role in improving traffic flow and control.

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Protecting the Scene of the Accident (Movie 16mm reel, purchase, 1969.

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Traffic Violation Case Preparation (Movie 16mm reel, purchase), 1969.

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Unit 6

DELINQUENCY PREVENTION AND CONTROL

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Unit 6

DELINQUENCY PREVENTION AND CONTROL

INSTRUCTIONAL OBJECTIVES

1. Ability to define juvenile delinquency.
2. Ability to observe, analyze, and describe the basic approaches toward explaining delinquency.
3. Ability to understand youth problems with their relationship to the patrol function.
4. Ability to describe the causes of, and methods used in prevention of, delinquency.
5. Ability to understand the police role in delinquency prevention.
6. Ability to demonstrate a knowledge of varied activities which police may undertake to prevent delinquency.
7. Ability to describe limitations on police efforts to understand and prevent delinquency.
8. Ability to appreciate the importance of juvenile delinquency prevention and control in police work.

CONTENT

INTRODUCTION

Since earliest times, man has been searching for the causes of delinquent and criminal behavior. Many persons of varied interests and from numerous fields have tried to find answers to this problem. It has been their expectation that, if the causes could be identified, this behavior could be corrected.

Parents are usually only interested in their own childrens' behavior. Other persons are interested in small groups of

individuals. Police,however, must work with large numbers of juveniles, each of whom has a unique personality, unique problems, and unique behavior. The police are unable to set up an individual system or unique program for each situation, or person, regardless of the person's uniqueness.

THE JUVENILE OFFENDER

The basic role of the police is the preservation of the peace, protection of life and property, and the apprehension of violators. Police do not punish, rehabilitate, or treat offenders.

Juveniles are not exempt from the law and must answer for their actions against other members of society. A young age, immaturity, and irresponsibility are not excuses for theft, vandalism, or violence. The fact that a person is young does not mean that less force is or can be used during apprehension.

What is a Juvenile Delinquent?

While definitions may vary between jurisdictions, a juvenile delinquent is:

- A person usually nineteen or under who behaves or acts in a manner that would be considered criminal behavior if this person were older.
- A person whose behavior is noncriminal, but whose actions are not in his own best interest, such as continual truancy, being beyond parental control, a runaway, etc.

Trends in Juvenile Offenses

Juveniles and youths up to the age of twenty-four are being arrested for burglary, theft, and auto theft in disproportionately large numbers. At the same time, members of this age group are seldom arrested for fraud, embezzlement, or vagrancy.

From known data, current trends seem to indicate that the numbers of juveniles and youths arrested in recent years has steadily increased and that this number will continue to increase. Additionally, the rate or percentage of arrests of juveniles and youths has also been increasing and this rate is also expected to climb during the next decade.

Arresting a Juvenile

When a juvenile is taken into custody, the procedure involved in handling the case is the same as when police arrest an older person, although there are some differences in the reporting methods used.

When a juvenile is in custody, the police should contact the parents as soon as practicable. The parents should be given all the facts relating to the unlawful behavior of their child, and should be involved in the corrective process.

During interrogation, the officer should avoid practices which are harsh or brutal, or which would be likely to *force* a confession. Profanity is never appropriate. Instead, *police must respect the legal as well as the human rights of persons in custody, even in highly provocative situations.*

CAUSES AND PREVENTION OF DELINQUENCY

Complexity of Delinquence

Juvenile delinquency takes the form of many different kinds of behavior. These include taking drugs, rape, running away from home, purse snatching, etc. Obviously, juvenile delinquency is not a simple or consistent type of behavior.

These and other types of delinquent actions are performed by many kinds of youngsters, such as:

- the frightened nine year old who does what the gang does;
- the rebellious teenager who hates or is frustrated by adults or parents;
- the older youths who see crime as a way of life and steal for profit;
- the psychologically disturbed youth who abuses or tortures animals.

Delinquency may also be committed under varying circumstances, and for countless different reasons. Some examples are:

- bored youths notice an unattended car with the keys left in the ignition;
- when a boy with a reputation as a *ladies-man* feels the need to maintain his reputation and commits statutory rape;
- a victim of a street robbery is beaten or nearly killed by assailants of another race;

- a youngster with one parent who has too little time or energy to supervise the activities of the youngster resulting in truancy or excessive absence from school, and stealing from stores.

Some Explanations of Delinquency

What any person will do under various combinations of circumstances is difficult to predict. Answers depend on a person's personality; his internal (or *psychological*) factors, in combination with external (or *environmental*) factors. *There appears to be no single cause for delinquent behavior, which is the result of many factors combined in a variety of ways.* Generally, the psychological influences are related to the person's intellectual, emotional, and physical self. On the contrary, environmental influences are outside the person, and are the situations which a person faces and with which he must cope.

Psychological Influences. Psychological influences contributing to delinquency include anxiety, curiosity, fear, and numerous desires and needs.

The way a mature person sees things depends partly on how things really are, and partly on how the person wants them to be, or imagines them to be. Youngsters are no different; their outlook on life depends greatly on their past experiences.

Home life as psychological factor. If a juvenile's home life and environment was satisfying, chances are that a highly positive outlook on life exists, and that the boy or girl is friendly and trusting.

If, on the other hand, the youngster lived in a home where he or she was not wanted, was mistreated, neglected, or beaten, chances are that the youth may be hostile, suspicious, unfriendly and cunning toward everyone. This distrust may be particularly evident when the youth is confronted with authority in any form.

This attitude, in turn, causes others to avoid the troubled youth, which worsens his behavioral problems.

Lack of independence as psychological factor. As youths grow, they gradually become more and more independent of their parents and parental control. Often this desire for independence results in family squabbles when parents are unable or unwilling to grant a degree of freedom, or when parents exercise harsh and unrealistic authority. Children in these situations frequently rebel in anger against what they consider to be unfairness. Often, because they cannot strike back at the home, they take out their frustrations and hostilities in the form of delinquent behavior expressed against others outside the home.

These psychological problems sometimes result in wanton destruction of property, misbehavior in school, and other forms of rebellion against any and all forms of authority. Acts of vandalism, havoc, or mutiliation usually are directed away from the parents for fear of added punishment.

Frustration as psychological factor. Loss or denial by the parents of an object desired by the youth may result in fighting, robbery, rape or other forms of aggressive behavior, brought about by frustration. While everyone is frustrated in various ways almost every day, most frustration actually is quite harmless. In fact, a mild degree of frustration or anxiety may actually help to motivate a person in a variety of behaviors. However, at times it can become a major source of irritation.

The youth who does not have the clothes, or the money, or belongs to a minority race, or who cannot afford a certain movie, etc., will react to his or her circumstances as the individual sees them. Frustration often breeds aggression, and the greater the frustration, the more aggressive and drastic the resulting behavior becomes. Crime, vandalism, stealing, and other forms of misbehavior may be the result.

Neurotic and psychotic behavior as psychological factors. Another aspect of delinquent behavior is rooted in the fabric of early childhood experiences. Self-defeating behavior patterns can emerge. These abnormal psychological conditions may develop:

- *Neurotic behavior.* Neurotics are less seriously disturbed individuals who, although aware of what is real, and what is not, are characterized by compulsive or other self-defeating behavior patterns.

- *Psychotic behavior.* Psychotics are seriously disturbed people who are often unaware of what is real, and what is fantasy. They can be dangerous to themselves, and to society. Protective custody is often required for such individuals.

Environmental Influences. Another aspect of behavior affecting almost all persons, and particularly juveniles, is that resulting from the individual's environment, or the sociological factors.

Environmental factors may include the weather, cars, buildings, or other persons, such as the family, friends, police, etc.

Antisocial factor as environmental influence. Almost all social behavior is affected by what a person sees, hears, or experiences. If a youth is exposed to antisocial, or criminal influences, his behavior patterns will probably reflect this to some degree.

Disadvantaged childhood as environmental factor. Almost all youngsters have the same desire to succeed, but some have the additional problems of poor language and social skills. The result is that they feel that other youths have all the socially accepted advantages. These youngsters often act completely contrary or opposite to the ways society expects them to act. To achieve status in the eyes of their friends, they adopt ways approved by their friends.

Generally, many delinquents are not interested in academic pursuits or preparing for the future, but instead want instant gratification. They cultivate roughness, toughness, irresponsibility, often senseless violence, mugging, and other criminal acts as their way of reacting atainst what society expects of them. This is their way of achieving success with their peers. They are rewarded or reinforced in their mind for this unacceptable behavior.

Other factors of environmental influence. Other negative environmental influences exist:

- unthinking persons leave items in an unlocked car parked on a city street;
- sometimes a youth belongs to a delinquent gang which may give him status and a sense of belonging, but which also encourages him to learn antisocial values and criminal type skills;
- teachers may identify and treat a youth as a troublemaker, and police and other authorities act the same way toward the youth. This might cause the youngster to behave in accordance with this delinquent image, and to view himself as *bad*.

In short, environmental factors often cause delinquent behavior by creating situations that encourage the learning of antisocial values and attitudes. These factors also may set up blocks to legitimate ways of gaining their wants or desires.

DELINQUENCY CONTROL

While many explanations (such as lack of jobs, moral deterioration, poverty, lack of respect, etc.) can be offered, *there is no one theory that adequately explains the reasons for all delinquent behavior. There is no single cause and no single, simple method of preventing delinquency.*

It appears that delinquency is caused by a combination of factors and varying influences acting together on the individual. Treating just one, or reacting to just one of these influences, does not do much to overcome these delinquent tendencies.

Instead, the best promise toward control of delinquent behavior appears to be offered by a comprehensive approach -- an approach that combines a number of techniques geared toward reducing poor environmental influences, improving *good* environments, and treating youths who have adopted delinquent behaviors.

The new patrolman in a progressive juvenile division will be working more closely with psychologists, psychiatrists, and social workers, as well as juvenile probation officers, to accomplish this goal.

THE POLICE ROLE IN THE PREVENTION OF DELINQUENCY

Police Intervention

American police departments were created for, and have as their central role, the prevention of crime and delinquency. No other agency exists for these specific purposes. The police usually are the first ones who come in contact with situations and conditions that call for preventive action, and are the agency that must take action or react to these situations.

The police officer on the street has the job of handling the immediate delinquency problem, which in most cases involves a violation of a law. However, the police are also expected to handle situations that do not involve law violations, but do involve dangerous conduct on the part of youth. At times, police may need to take a youth into *protective custody*, an action based on the facts of *what* the youth did. *Why* the youth did this violation is the responsibility of other social agencies.

Data Requirements. Two basic types of information are needed to aid in the administration of juvenile justice:

- One type relates to the specific details or physical evidence of the incident, such as *who*, *what*, *where*, *when*, and *how*, and the identity of the violator.

- The second type of information needed to administer justice relates to *why* the violation was committed, or the possible causes for this behavior. This information is needed to help the court determine the most helpful rehabilitation treatment for the good of the offender and the protection of society.

Police gather the first type of evidence. In many communities, a social worker, or juvenile probation officer, investigates and reports the *why* type, rather than the police.

Interagency Cooperation. Because of their responsibility for crime prevention, the police usually are given the greatest amount of cooperation from other agencies working to prevent delinquency problems.

The causes of delinquency are highly complex and interwoven. To deal with these various causes, a multitude of agencies and institutions have been organized to provide a coordinated effort to work toward the prevention of delinquency. These agencies include guidance groups, employment services, welfare, recreation programs, etc. Delinquency prevention is not the chief function of any of these other agencies, and very possibly would not be a matter of serious concern to any agency, were it not for police leadership and coordinating efforts.

Anticipating Criminal Action. A more difficult problem for police occurs when a law has not been clearly violated, yet action needs to be taken by the officer. The threat of violation, or possibly the degree of violation, is highly complex and perplexing.

In anticipating problems, officers must also constantly guard against unnecessary or unwarranted interference with the possible offender. The fact that the officer disapproves of certain types of juvenile conduct does not give him the right to antagonize or disperse a group. The officer must have good reason for taking action.

There is a very personal reason for this caution on the part of the police. Today's youth are the adults of tomorrow, and the support provided for police services in the future will depend to a large extent on the relationships established with the youth of today. Additionally, by helping children in trouble, the police are helping the parents, which also aids in gaining the parents' support and cooperation.

Thus, ill-conceived actions on the part of the police can *boomerang,* and ultimately work to their detriment.

Prevention Techniques

Police have developed a number of basic techniques or services that do much to decrease the opportunities for delinquent acts.

Patrol and Inspection. Frequent patrol and inspection can actively deter delinquency by showing a continuing police presence. Other techniques include enforcing regulations pertaining to dance halls, bars, swimming pools, etc.; and apprehending persons who may contribute to delinquency.

Finding Potential Problems. These activities help the police to:

- identify areas where delinquency prevention programs may be of value,
- identify youths who may be beginning to get into trouble,
- identify areas where legitimate forms of recreation or treatment may be needed,
- identify other services needed in high delinquency neighborhoods. These include vocational training, job placement, recreation programs, counseling, community relations programs, etc.

Working with Other Agencies. Police make other agencies aware of these possible problems, and offer recommendations of ways in which these agencies may help to better the community. They help to show where such efforts would do the greatest amount of good. They work cooperatively with these agencies.

Police-Initiated Activities. The police initiate separate efforts toward:

- helping youths find jobs,
- encouraging drop-outs to get back into school,
- conducting recreation programs,
- referring youths to other agencies which may be able to be of help to young people who appear to be getting into trouble.

In areas where a high degree of delinquency exists, police often involve youths in police-related activities. These activities, such as traffic patrol, or controlling recreation programs, provide youth with jobs offering some prestige, and possibly even some pay for their services.

Police also work to provide other kinds of services such as:

- placing sprinklers on fire hydrants during hot weather,
- closing streets for sledding, or supervising skating areas in cold weather,
- attending youth activities such as dances and athletic events to help youths maintain order,
- working with student councils and neighborhood youth councils to discuss and resolve common problems, exchange ideas, and improve mutual understanding and trust,

- sponsoring and helping plan youth activities, such as: helping the sick or elderly, cleaning up debris in the neighborhood, constructing athletic facilities, working in hospitals, fixing and distributing toys at Christmas, organizing playground activities and trips,

- arranging for youth to be represented before political or governmental bodies.

Correction Techniques

Youthful persons continue to commit vandalism and crime despite the best known police prevention techniques. Delinquency is a form of conduct that would be considered criminal if the youth were older. Therefore, techniques for investigating and reporting such acts are the same as those used for adults.

Need for Discretion. Among the basic criteria for a good police officer is his ability to use discretion in the decision whether or not to make an arrest, or to prosecute. The officer should always keep in mind the best interests of both society and the individual.

Need for Involving Parents. When police make contact with juveniles, the parents should be notified whenever an official report is to be filed. This will alert the parents to their child's delinquent behavior, with the probable correctional action to be taken.

However, police normally do not notify parents of minor incidents of which no record is made. Such minor incidents would include taking juveniles into custody:

- for habitual truancy from school,

- for lack of control by parents, and

- when a situation exists that is not healthy or conducive to the well-being of the youth.

The parents are notified, preferably by personal contact of an officer, at the time the youth is taken into custody. They are given complete details about the situation, including the place of confinement. Interrogation of the juvenile can take place with or without the parents' presence or cooperation, although efforts should be made to have the parents present. As usual, the youth should be advised of his legal rights before interrogation.

Need for Prior Data. Investigative procedures include reports on the normal activities of the offender, which can aid in determining possible actions. These include:

- prior juvenile police records,
- an overall impression of the juvenile,
- the possible risks posed to both the juvenile and the community,
- the ability of the parents to supervise the child, and
- the home atmosphere and influences.

Possible Correctional Actions. Possible resulting actions, depending on the seriousness of the criminal act and the investigative reports, may be:

- outright release of the child to the parents;
- release to the parents with referral to an appropriate community agency;
- referral to juvenile court with release of the youth to the parents' custody until the appearance in court;
- referral to juvenile court,
- placement of the child in a foster home, shelter, or place of detention until court action has been taken.

Other policies or procedures relating to the handling of youth, as prescribed by the local police agency, are also followed.

THE POLICE PATROL AND YOUTH PROBLEMS

Officers assigned to patrol functions act as a crime prevention force regardless of the age of the offenders with whom they must come into contact.

The fact that juveniles are not exempt from law enforcement cannot be overemphasized. The patrolman's duties are perserving of the peace, and protecting life and property. If a suspect turns out to be a juvenile, he or she is still investigated, identified, and handled, in the same manner as the adult. This may include the use of force by the police officer if necessary. The probable cause or grounds for arrest are the same for juvenile and adult violators of the law. Even the handling of evidence is the same, whether the offender is referred to juvenile court or criminal court.

Knowledge of Youth Problems

The police officer or aide needs to be familiar with certain

general kinds of youth problems for greatest effectiveness. Youths spend much of their time at such hang-outs as hamburger or pizza stands, drive-in restaurants, candy stores, drug stores, and places of recreation. These places seldom have trouble in their vicinity, but are the places where some youths plan delinquent or criminal activities.

The officer or aide should be alert to investigate any abnormal activity changes, such as absence of the usual group from its ordinary location. Youths frequently block sidewalks and drives near these hang-outs, and are noisy or raucous; the officer must control these situations before they increase to the point where they may be major problems.

Cooperation of Juveniles and the Police

Juveniles are normally ready to help an officer or aide when he is seeking information. It is an important part of the officer's job to be aware of what is happening on his beat or in his patrol area. This job can be made easier if the officer has reliable sources of information. *Knowing how to handle and react to youths can improve communication and mutual trust, provide leads or tips, and can be a great advantage to the officer.*

The Truancy Problem

Although truancy is essentially a school problem, police often become involved when the truancy is continuous. Truancy often is a sign of potential delinquency, and may indirectly lead to criminal acts. Local policies of the school authorities and police department usually describe how the officer or aide is to handle truants.

Adolescence - A Period of Testing

Adolescence is a period of normal growth when youth are no longer children, but are not yet adults; this time period is a transition from childhood into adulthood. The adolescent's physical and social maturity is gradually developing during this stage. Youths find themselves in an in-between status, a *no-man's land*, as neither children nor adults.

This results in the formation of a teenage culture or way of life style of their own. Adolescents accept their own peers, and set their own acceptance standards, but some withdraw from adults.

Teenagers frequently test the authority of parents, teachers, police, etc., as their way of showing their independence.

Youths show-off, and say and do things in front of a police officer to *test* him. These testings are usually composed of things which may not be done by adults, who are more sure of themselves and know where they stand. Youths often talk back loudly to authorities. They are insulting and try to learn just how much they can get away with.

Behavior of this type is an indication of the maturity level of the adolescent, and is accepted by the officer or aide as such - a part of the growing-up process. Police officers should find a calm, relaxed way of dealing with this type of behavior. With tact and understanding on the part of the patrolman, this can be accomplished without embarrassing them, or resorting to threats. By being fair and treating adolescents with respect, the police officer can usually secure the compliance of youths with the law.

The Problem of the Gang

The sight of a teenage gang is often of great concern to adults. It raises thoughts of crime, fights, and delinquency, and makes responsible persons wonder why these youths are not doing something more constructive. During adolescence, both law-abiding teenagers and delinquents form into groups. This is a manifestation of the natural tendency of all people to be with persons of the same age and interests. This group activity is especially strong during adolescence.

Adolescent groups take many forms. They may be organized around athletics, friends, school interests and activities, recreation interests, hobbies, etc. Members of these social groups seldom have criminal or delinquency problems. However, one type of group, known as the *gang*, should be distinguished from these other types.

Police agencies classify gangs as any group of individuals whose delinquent behavior has brought them to the attention of the police, whether they have a formal organization or not. The gang is characterized by a close degree of togetherness and loyalty between members. They are usually organized to participate in conflict or fights, or engage in criminal activities. Other characteristics often seen in gangs include:

- the great control which the gang leader holds over the gang members,
- the delinquent, or criminal and antisocial intent of members,
- the continual hostility shown toward the police.

The gang:

- gives members social approval, security, status, friends, and thrills;
- teaches them how to commit crimes and dispose of stolen goods safely and at a good price;
- gives them a code of conduct which must be followed; and
- gives them support if it should be needed in criminal and other activities.

Gangs in larger cities frequently engage in fights or conflicts with other gangs. Police find it difficult to obtain information from members, although some gang members do talk when alone.

Students are aware that it is normal for adolescents to travel in groups of one sort or another, and that most juvenile groups are not gangs, and are not a serious police problem. However, the control of organized gangs is a serious and complex problem which disturbs all law-enforcement agencies.

The best means of control is very probably the least appreciated - creation of an atmosphere of cooperation and trust in the neighborhood, so that gangs have no reason for formation; supplemented with opportunities for wholesome and creative juvenile activity.

STUDENT LEARNING ACTIVITIES

- Ask a police sergeant or criminal lawyer for the legal definition of a juvenile delinquent in your community.
- Discuss causes and effects of behavior problems with a psychologist. In what ways do school counselors explain juvenile delinquency?
- Visit a police station and ask help in compiling a list of the types of delinquency problems in the community.
- Determine how much juvenile delinquents cost your local community in a recent month in terms of property loss, police time and effort, court actions, etc. Describe the findings to the class.
- Debate statements such as, *Bad home environment is the cause of juvenile delinquency*, or *It is wrong to join a gang*.
- Interview a probation or parole officer, and ask him to describe his role in the treatment, prevention, and rehabilitation of youthful offenders.

- Write a report describing ways in which the overall *environment* of the community could be improved.

- Lead a class discussion on ways in which students could help to improve their environment and their community.

- View and discuss films on juvenile delinquency, as for example, *The Delinquents, Part I and II, Mike Makes His Mark,* and *Adolescence.*

TEACHER MANAGEMENT ACTIVITIES

- Conduct an in-depth class discussion on some of the causes of delinquency.

- Lead a class *brainstorm* session on ways by which delinquency could be reduced in the community.

- Compile a list of delinquent acts committed in the community. Conduct a class discussion on reasons for committing these acts with measures that could be taken to prevent their reoccurrence.

- Ask the school psychologist to describe factors which lead to and which inhibit juvenile delinquency. In what ways do counselors handle these problems?

- Allow students to debate such statements as, *Bad home environment is the cause of juvenile delinquency,* or *It is wrong to join a gang.*

- Compile a file of newspaper stories describing acts of juvenile delinquency. Lead a class discussion on possible reasons for these acts, and what students and/or the community might do to prevent a reoccurrence.

- Ask a police officer to describe the role of the police department and its relationship and attitude toward youth.

- Show and discuss films such as *The Delinquents, Parts I and II, Mike Makes His Mark,* and *Adolescence.*

RESOURCES

School Experiences and Delinquency, M. L. Erickson, M. L. Scott, and Lamar Empey, U. S. Department of Health, Education and Welfare, 1965.

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Training Police for Work With Juveniles, Nelson A. Watson and Robert N. Walker, International Association of Chiefs of Police, 1965.

Pamphlets (Training Keys) available from International Association of Chiefs of Police

Causes of Juvenile Delinquency, 1966

Basic Problems in Delinquency Control, 1964

Adolescent Growth and Development, 1965

Juvenile Groups and Gangs, 1966

The Runaway Juvenile, 1968

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The Delinquents Part II (Movie 16mm reel, rental), Association Films, 1970.

Mike Makes His Mark (Movie 16mm reel, purchase), National Education Association, 1970.

Juvenile Delinquency, 2nd Edition, Ruth S. Cavan, J. B. Lippincott, 1969.

Juvenile Delinquency: Its Nature and Control, Sophia M. Robison, Holt, Rinehart, and Winston, 1969.

Community Problem Solving: The Delinquency Example, Irving Spergel, University of Chicago Press, 1969.

Rebel Without a Cause, Robert M. Lindner, Grove Press, 1969.

Adolescence (Series) (Movie 16mm reel, rental), Indiana University A-V Center, 1970.

The Psychology of Adolescence, 7th Edition, Luella Cole and Irma N. Hall, Holt, Rinehart, and Winston, 1969.

Appendix A

RESOURCE SUPPLIERS

Appendix A

RESOURCE SUPPLIERS

This appendix is a listing of suppliers of resources itemized at the end of each unit of the individual sections.

American Mutual Insurance Alliance
20 North Wacker Drive
Chicago, Illinois 60606

Appleton-Century-Crofts
Affiliate, Educational Division,
Meredith Corporation
440 Park Avenue South
New York, N.Y. 10016

Arco Publishing Company
219 Park Avenue South
New York, N.Y. 10003

Arno Press, Inc.
Publishing and Library Service
of The New York Times
330 Madison Avenue
New York, N.Y. 10017

Association Films, Inc.
600 Madison Avenue
New York, N.Y. 10022

Bailey-Film Associates
Division of CBS/Holt Group
11559 Santa Monica Boulevard
West Los Angeles, CA 90025

Charles Cahill & Associates, Inc.
P. O. Box 1010
Hollywood, CA 90028

Encyclopaedia Britannica
Educational Corporation
425 North Michigan Avenue
Chicago, Illinois 60611

Foundation Press, Inc.
170 Old Country Road
Mineola, N.Y. 11501

Free Press
Orders to MacMillan Company
866 Third Avenue
New York, N.Y. 10022

Glenco Press
Division of MacMillan Company
8701 Wilshire Boulevard
Beverly Hills, CA 90211

Grove Press, Inc.
53 E. 11th Street
New York, N.Y. 10003

Harper and Row Publishers
College Department
49 East 33rd Street
New York, N.Y. 10016

Harvard University Press
Joint Center for Urban Studies
Kittridge Hall
79 Garden Street
Cambridge, Massachusetts

Henk Newenhouse/Novo
1825 Willow Road
Northfield, Illinois 60093

Holt, Rinehart, and Winston, Inc.
383 Madison Avenue
New York, N.Y. 10022

Indiana University Audio-Visual Center
Field Services Department
Bloomington, Indiana 47401

International Association of
Chiefs of Police
1319 18th Street, N.W.
Washington, D.C. 20036

International City Management
1140 Connecticut Avenue, N.W.
Washington, D.C. 20036

Law Enforcement Assistance
Administration
Statistics Division
633 Indiana Avenue
Washington, D.C. 20530

Legal Book Corporation
316 W. Second Street
Los Angeles, California 90012

J. B. Lippincott Company
East Washington Square
Philadelphia, Pennsylvania 19105

Little, Brown and Company
34 Beacon Street
Boston, Massachusetts 02106

McGraw-Hill Book Company
330 West 42nd Street
New York, N.Y. 10036

National Education Association
1201 16th Street, N.W.
Washington, D.C. 20036

Northwestern University Press
1735 Benson Avenue
Evanston, Illinois 60201

F. E. Peacock Publishers
401 West Irving Park Road
Itasca, Illinois 60143

Prentice-Hall, Inc.
Orders to Englewood Cliffs, N.J.
70 - 5th Avenue
New York, N.Y. 10011

Random House, Inc.
Subsidiary of Radio Corporation
of America
201 E. 50th Street
New York, N.Y. 10022

Serina Press
70 Kennedy Street
Alexandria, Virginia 22301

Charles C. Thomas Publishers
301 - 327 E. Lawrence Avenue
Springfield, Illinois 62703

The Traffic Institute Publications
Orders to Northwestern University
Press
1735 Benson Avenue
Evanston, Illinois 60201

United States Department of
Health, Education, and Welfare
330 Independence Avenue
Washington, D.C. 20201

United States Government Printing
Office
Division of Public Documents
Washington, D.C. 20402

United States National Audiovisual
Center
National Archives and Records
Service
Washington, D.C. 20409

Universal Publishing and
Distributing Corporation
235 E. 45th Street
New York, N.Y. 10017

University of Chicago Press
5750 Ellis Avenue
Chicago, Illinois 60637

Westinghouse Learning Corporation
2680 Hanover Street
Palo Alto, California 94304

John Wiley & Sons, Inc.
605 3rd Avenue
New York, N.Y. 10016

Appendix **B**

SUGGESTED EVALUATION QUESTIONS FOR PRE- AND POST-TESTS

Introduction

These tests are keyed to the Law Enforcement Services guide of the Public Service Occupations curriculum.

The Law Enforcement guide includes the following units:

Unit 1 — Organization And Operation Of Police Departments
Unit 2 — Basic Elements And Issues In Administration of Justice
Unit 3 — Preventive Patrol Techniques
Unit 4 — Investigative Techniques
Unit 5 — Traffic Direction And Control
Unit 6 — Delinquency Prevention And Control

These tests were developed to help teachers:

(1) measure student learning gain.
(2) determine if the instructional objectives have been met.

Test Contents

Any evaluation of student learning should adhere closely to the intended outcomes expressed in the written objectives. Therefore, each test is based on the specific instructional objectives found in its corresponding unit in the Orientation guide. Every item of each test is directly associated with one of the objectives found in the guide for that unit.

These tests are structured to help determine whether the student has become competent or not in each unit. The items for each test relate only to the instructional objectives found at the beginning of that unit in the guide. No test items refer to material found in previous or later units. Consequently, each unit in the teacher's guide and its corresponding test can be used independently.

The evaluative approach used in these tests is not designed to measure the relative standing of each student to an actual or hypothetical population. Rather, it is designed to report a student's performance solely in terms of objectives mastered or not mastered. Each student can reach or exceed the minimum performance standard or criterion. Hence, this testing is called criterion referenced testing.

Directions

The tests have been prepared as master copies which may be duplicated for student distribution.

There is a separate test for each unit of instruction in the curriculum guide. For example, test number one can be used as a pretest and a post-test with the content in Law Enforcement Service Unit 1 — Organization and Operation of Police Department.

Because each class is unique, instructors may add or delete any test items desired.

These tests have been given under nearly every conceivable condition, formal group testing, informal individual sessions, and "take home" tests. In so far as can be determined, satisfactory results were obtained under every condition.

In response to the demand for a system that is easy to use, a convenient answer key for each test has been included in this folder.

The tests provide an objective method for determining student learning gain, while freeing teachers to use valuable time for instruction.

Validity

The validity of any test must be determined in reference to the particular use for which the test is being considered. As these tests are essentially measures of student achievement, they must have content validity. Content validity involves the systematic examination of the test content to insure that it covers a representative sample of the behavior domain to be measured. By employing questions that directly relate to the instructional objectives in each unit, content validity is insured.

An experimental edition of this test was field tested in twelve schools, which were selected on the basis of size of school and community. Over 1,000 secondary school students were involved in the validation testing. Socio-economic groups taking the test ranged from the disadvantaged to upper middle-class. The schools were also selected to gain a student population from urban, suburban, and rural areas. In each of the schools, the teacher first gave the students a pretest before the content was introduced. The same testing instrument was used as a post-test. The objectives were to measure student learning which took place as a result of studying the material in the instructional unit, and to establish criterion referenced tests for use by schools throughout the country. For this purpose, a percentage passing of 70 percent or above on the post-test was considered to be an acceptable criterion mastery for that unit. No norms were established for these tests. It is suggested that each student be able to successfully pass 70 percent of the questions for each instructional unit that he is tested on. During this field test, suggestions for improving these tests were also made. The criterion referenced tests in this booklet are based on the pretest and post-test material used in this validation study.

Other Means of Evaluation

It should be remembered that the instructor can use a wide assortment of test situations to evaluate students.

The instructor can assign an essay paper on the relationship of law-and-order and freedom. Students can choose the most qualified police applicants from a group of applications prepared by the teacher.

After viewing pictures or a video tape of a crime, each student can state the proper procedure for preliminary investigation. Students can list where they would look for evidence.

Crimes can be "staged" in the classroom, with each student simulating the role of the police officer in charge.

After viewing a film or videotape of an accident, each student can list the proper steps to be taken. Preparing an accident report can be a part of this test.

The instructor can ask each student to play an officer's role in civil and family disputes. Each student can interrogate "witnesses" and "offenders." These methods can be used to complement the tests in this folder.

Acknowledgements

The Public Service Occupations tests were developed and field tested in twelve locations. While many people were involved in this project, the staff is particularly indebted to the following people:

Lillian Avery,	Test Research Center Los Angeles, CA
Victor Backstrom,	Long Beach Unified School District Long Beach, CA
Dr. William E. Burns,	State University of New York Buffalo, New York
William Crane,	San Diego Unified School District San Diego, CA
Thomas Franklin,	San Diego Unified School District San Diego, CA
Gilbert Garcia,	Sacramento City Unified School District Sacramento, CA
Lt. Charles Kane,	San Leandro Police Department San Leandro, CA
Dr. Nellie M. Love,	Sweet Home Central School District Amherst, New York
James B. Mayo,	Fremont Unified School District Fremont, CA
Myron Nadolski,	Grant Joint Union School District Sacramento, CA
Nadine L. Reed,	San Diego Unified School District San Diego, CA
James J. Reilley, S.J.,	Canisius High School Buffalo, New York
Rosalia Salinas,	San Diego Unified School District San Diego, CA
Paul E. Sugg,	Williamsville Central Schools Williamsville, New York
Tom Schrodi,	Orange Unified School District Orange, CA
Thea Stitum,	Sacramento City Unified School District Sacramento, CA

Project Staff

Patrick J. Weagraff, Ed. D., Project Director

James J. Lynn, Curriculum Specialist

Constance F. Gipson
Assistant Curriculum Specialist

Harold M. Blue, Senior Editor

Lillian Deger, Typist

Miriam Dong, Typist

Preparing for Public Service Occupations

Evaluation Questions

1

Unit 1 Organization and Operation of Police Departments

On the right are some job descriptions. Write the correct title on the appropriate line. Possible answers are listed below. No answer can be used more than once.

1. _____ Non-uniformed criminal investigator

2. _____ This rank can replace Sergeant when that position does not exist. It involves administrative and supervisory duties.

3. _____ Individual who sets policy for the Department and is responsible for the activities of the Department.

4. _____ The lowest officer of the Police Department.

5. _____ First level of supervision.

6. _____ Individual who usually has duties in communications.

7. _____ Above the rank of lieutenant, this person is usually in charge of a region, such as a station or precinct.

8. _____ The person with this rank works directly under the Chief, with the duty of running the Department in the Chief's absence.

9. _____ A rank common to larger Police Departments only. This person is in charge of patrol, investigations, records, and training.

10. _____ Persons who can enforce the law.

11. _____ Computer technicians, clerks, laboratory scientists.

Possible Answers

Captain	Inspector	Deputy Chief of Police	Sergeant
Chief of Police	Lieutenant	Desk Lieutenant	Sworn Personnel
Civilian Personnel	Patrolman	Detective	

Most police departments are arranged in four ways:

A. Administrative services
B. Personnel
C. Operational services
D. Auxiliary Services

Some of the activities of the police department are listed below. Each of these activities is a part of one of the four functional ways listed above. Determine that function and place the correct letter on the line.

EXAMPLE: D Jail management

1. _____ Control of public gathering
2. _____ Entrance qualifications of officers
3. _____ Promotion of officers
4. _____ Inspection and control of the department
5. _____ Keeping records of offenders
6. _____ Traffic control
7. _____ Juvenile delinquency
8. _____ Planning and research for the department
9. _____ Recruitment of officers
10. _____ Patrol
11. _____ Maintaining a communications system
12. _____ Criminal investigation
13. _____ Public relations for the department
14. _____ Disposing of complaints
15. _____ Arresting criminals
16. _____ Training of officers

Answer Key

over _____ above _____

1. Detective
2. Lieutenant
3. Chief of Police
4. Patrolman
5. Sergeant
6. Desk Lieutenant
7. Captain
8. Deputy Chief of Police
9. Inspector
10. Sworn Personnel
11. Civilian Personnel

1. C
2. B
3. B
4. A
5. D
6. C
7. C
8. A
9. B
10. C
11. D
12. C
13. A
14. C
15. C
16. B

Preparing for Public Service Occupations

Evaluation Questions

2

Unit 2 Basic Elements and Issues in Administration of Justice

Fill in the blanks using the answers below. No answer may be used more than once.

1. The crimes against the Jewish people in World War II were heard in _____
_____
2. _____ interprets the Constitution.
3. Before a case is taken to the Supreme Court, is is usually reviewed by _____
_____
4. State laws are a part of the _____ system.
5. The Texas Rangers were _____ police.
6. The chief law enforcement officer in the county is called _____
_____
7. The F.B.I. is a part of the _____ enforcement system.
8. The municipal police are _____ police.
9. After individuals have served a part of their sentence, they may be placed on _____
_____
10. _____ can be granted to persons instead of jail terms.
11. Prisons and jails are a part of the _____ system.
12. The _____ must enforce all federal, state, and local laws.
13. The Municipal police are a part of the _____ system.
14. Modern prisons try to _____ prisoners.

Possible Answers

an International Court	legal	rehabilitate
city	Municipal Police	state
correctional	parole	the Sheriff
enforcement	probation	the Supreme Court
federal		U.S. District Court of Appeals

Answer Key

1. an International Court
2. The Supreme Court
3. the U.S. District Court of Appeals
4. legal
5. state
6. the Sheriff
7. federal
8. city
9. parole
10. Probation
11. correctional
12. Municipal police
13. enforcement
14. rehabilitate

Preparing for Public Service Occupations

Evaluation Questions

3

Unit 3 Preventive Patrol Techniques

1. **In colonial America, patrol consisted of:**
   A. An effective, modern police patrol ____
   B. Unpaid watchmen ____
   C. Paid watchmen for day and night patrol ____
   D. Watch systems for daytime only ____

2. **A patrolman is not expected to:**
   A. Give medicine to sick persons ____
   B. Help settle family disputes ____
   C. Herd cattle off expressways ____
   D. Search for lost children ____

3. **The primary duty of patrol is to:**
   A. Punish offenders ____
   B. Prevent crime ____
   C. Catch and convict criminals ____
   D. Conduct investigations ____

4. **Preventive patrol must convince criminals that:**
   A. They may have little time to escape ____
   B. There are few safe times to commit a crime ____
   C. The opportunity to commit a crime does not exist ____
   D. They will be punished if they commit a crime ____

5. **Which statement is incorrect?**
   A. In order for a crime to be committed, the criminal must have the desire and the opportunity to commit a crime ____
   B. In the future, patrol will accomplish total prevention of crime ____
   C. The areas that are patrolled most are the areas in which crime is likely to be committed ____
   D. Information is needed to prevent and to solve criminal activity ____

6. **Non-criminal activities:**
   A. Can be the most dangerous police activities ____
   B. Can take up two-thirds of a patrolman's time ____
   C. Can involve barking dogs, disturbances, lost property, missing persons, and runaways ____
   D. All of the above ____

7. **In civil disputes between two adults, officers:**
   A. Let the two parties fight it out ____
   B. Find out which side is right ____
   C. Remain neutral in trying to get the facts ____
   D. Act as judges to solve the matter ____

8. When officers spot a street fight between two people, they:

A. Rush in at once _____
B. Wait to see if the fight is serious _____
C. Wait for their fellow officers to arrive _____
D. None of the above _____

9. At the scene of a disturbance, the officer's job is to:

A. Find out if anyone has been injured and to care for the injured _____
B. Calm the participants _____
C. Get the facts _____
D. All of the above _____

10. Officers should question:

A. People who they think are guilty but were freed by the courts _____
B. People whose appearance does not meet the officers' ideas about dress _____
C. People the officers have reason to believe are about to commit a crime _____
D. All of the above _____

11. Accidents are investigated because investigations can help in:

A. Gathering evidence regarding the accident _____
B. Identifying hazardous conditions _____
C. Identifying violations that are likely to cause accidents _____
D. All of the above _____

12. Which order of procedure is correct for the policeman at the crime scene:

A. Apprehend the criminal, minister to the dead and wounded, make sure that a crime has been committed _____
B. Minister to the dead and wounded, make sure a crime has been committed, identify the criminals _____
C. Make sure that a crime has been committed, find out the whereabouts of the criminal, minister to the dead and wounded _____
D. Catch the criminals, identify the criminals, make sure a crime has been committed _____

13. Specialized patrol includes:

A. Public police lectures _____
B. Stakeouts and rescue teams _____
C. Strike, crowd and riot control _____
D. All of the above _____

14. Which statement concerning foot patrol is incorrect?

A. It increases coverage and mobility _____
B. It increases person-to-person contact _____
C. It increases chances of getting information _____
D. It increases an officer's anticipation of difficult incidents _____

Answer Key

1. B	4. C	7. C	10. C	13. D
2. A	5. B	8. A	11. D	14. A
3. B	6. D	9. D	12. B	

Unit 4 Investigative Techniques

1. **Officers can gain information about crimes by:**
   A. Talking to witnesses ____
   B. Talking to violators or offenders ____
   C. Looking at physical objects ____
   D. All of the above ____
2. **Which statement is incorrect?**
   A. Scientific tests or objects are of greater value as evidence than human description ____
   B. Human description is of greater value as evidence than scientific tests ____
   C. Every crime results in physical changes ____
   D. Much information obtained by police such as tips, rumors and lie-detector tests are not suitable in a court as evidence
3. **Which of these would investigating officers look for?**
   A. Physical changes in the victim due to injuries, chemicals, or impact ____
   B. Physical changes in the suspect's condition ____
   C. Physical changes at the scene of the offense ____
   D. All of the above ____
4. **Which of these is least important for an investigating officer to know?**
   A. The suspect's family background ____
   B. The make, year, color, license of the suspect's car ____
   C. The suspect's destination ____
   D. The suspect's physical description ____
5. **Which statement is incorrect?**
   A. The officer should not disturb the scene of the crime ____
   B. The officer should not allow others to disturb the scene of the crime ____
   C. Witnesses should be placed together in one room and allowed to tell their story ____
   D. The officer should take notes of all information relating to the crime scene ____
6. **Which one must arrange for the evidence to be collected:**
   A. The investigating officer ____
   B. The detective unit ____
   C. The police laboratory ____
   D. The Chief of Police ____
7. **The preliminary investigation is over when:**
   A. The suspects are indicted ____
   B. The suspects are convicted ____
   C. All information obtained is turned over to detectives ____
   D. The suspects are booked and information obtained is given to the desk lieutenant ____

8. Prompt arrival at a crime scene is necessary to:

A. Prevent evidence from becoming obscured _____
B. Prevent witnesses from disappearing _____
C. Prevent further injury and destruction _____
D. All of the above _____

9. At the scene of the crime, officers should:

A. Permit the witnesses to remain at the spot where the crime occurred _____
B. Keep anyone not involved away from the scene _____
C. Permit all other police officers to enter the premises _____
D. Permit the owner of the premises to enter the site of the crime _____

10. The most important piece of evidence that can be obtained is:

A. Fingerprints _____
B. Verbal descriptions by witnesses _____
C. Bloodstains _____
D. Footprints _____

11. A disadvantage of fingerprints is that:

A. The moisture in the impressions can evaporate _____
B. Rain or snow can destroy them _____
C. Wind can cause them to worsen _____
D. All of the above _____

12. Which statement is incorrect?

A. Some prints are normally not visible and must be treated to be collected _____
B. Prints left on a porous surface such as rough wood will last longer than those left on a smooth surface _____
C. Visible prints are prints that result from a finger covered with blood, oil, or dirt _____
D. Plastic or moulded impressions are prints made when a finger leaves an impression on a soft surface such as soap, wax, or grease _____

13. In conducting interviews, officers should:

A. Find some way of establishing a friendly relationship _____
B. Wait until a few hours after the incident to help the witness become emotionally calm _____
C. Sit behind counters or desks in a formal manner _____
D. Do most of the talking _____

14. Field notes are important because:

A. They help the officers to recall information _____
B. They help spot differences in stories _____
C. They suggest new ways of questioning _____
D. All of the above _____

Answer Key

1. D	4. A	7. C	10. A	13. A
2. B	5. C	8. D	11. D	14. D
3. D	6. A	9. B	12. B	

Unit 5 Traffic Direction and Control

1. **In directing traffic, the center of the intersection should be selected:**
   A. When traffic is moving at high speeds _____
   B. When there are many pedestrians crossing _____
   C. When traffic signals are not working _____
   D. When there is little clearance between opposite flows of traffic _____

2. **To stop a driver, an officer should:**
   A. Look at the car and point directly at it _____
   B. Look directly at the driver and point at the driver _____
   C. Step in front of the driver _____
   D. Raise one hand so that the driver can see the back of the hand _____

3. **Complicated gestures:**
   A. Are necessary to direct traffic that flows in many ways _____
   B. Reduce the number of accidents _____
   C. Cause confusion and traffic violations _____
   D. Are basic to traffic control _____

4. **To start traffic an officer should:**
   A. Pivot and place shoulders parallel with the vehicle waiting to move _____
   B. Point to the cars in the back of the line _____
   C. Raise one hand so that the palm is facing the driver _____
   D. Stand with both arms in an outward position _____

5. **Short, fast blasts on a whistle mean:**
   A. Stop at once _____
   B. Start immediately _____
   C. Dangerous conditions _____
   D. Speed up _____

6. **Which statement is incorrect:**
   A. Officers should allow longer periods of traffic flow on heavily traveled streets _____
   B. If intersecting streets have the same amount of traffic, the officer must select one for a longer traffic flow than the other one _____
   C. Slower drivers must be signaled to speed up _____
   D. Double parking interferes with normal traffic flow and causes hazards _____

7. **When traffic is congested, the officer should:**
   A. Permit right turns from the left lane _____
   B. Permit left turns from the right lane _____
   C. Signal all drivers to turn _____
   D. Direct all traffic to go straight ahead, preventing turns _____

8. **When officers are directing traffic they should:**
   A. Hold pedestrians on the curb until all traffic is stopped _____
   B. Permit pedestrians to walk out in front of oncoming traffic _____
   C. Permit blind, lame, and elderly people to cross at all times _____
   D. Permit pedestrians to jay walk if it is not dangerous _____

9. **A flexible treatment of traffic violations:**
   A. Encourages people to make more traffic mistakes _____
   B. Causes the public to become resentful _____
   C. Lessens resentment by the public _____
   D. Is hazardous _____

10. **Which statement is incorrect?**
   A. Officers must be prepared to confront anxiety, anger, and abuse when stopping traffic violators _____
   B. Persons who violate traffic laws are usually in the lowest class of American society _____
   C. Most people are usually unable to admit their driving errors _____
   D. Officers must approach traffic violators with a complete absence of any desire to harm threaten, or punish them _____

11. **In issuing tickets, officers should operate in this order:**
   A. Notify the police dispatcher, check the stolen car list, approach the driver _____
   B. Check the stolen car list, call the police dispatcher, approach the driver _____
   C. Approach the driver, check the stolen car list, call the police dispatcher _____
   D. Approach the driver, call the police dispatcher, check the stolen car list _____

12. **The causes of accidents are investigated to:**
   A. Determine whether greater enforcement is required _____
   B. Form guidelines for traffic engineering programs _____
   C. Form guidelines for traffic education programs _____
   D. All of the above _____

13. **When responding to an accident call an officer should:**
   A. Drive as rapidly to the scene as possible _____
   B. Get as much information as possible from the dispatcher _____
   C. Drive at a rapid rate if there are no injuries _____
   D. Observe the speed limit at all times _____

14. **A missing driver may have:**
   A. Been unable to find a parking spot nearby _____
   B. Exchanged information and then driven away _____
   C. Suffered a concussion and could be walking around the scene in a daze _____
   D. All of the above _____

Answer Key

1. C	4. A	7. D	10. D	13. D
2. B	5. C	8. A	11. B	14. B
3. C	6. B	9. C	12. A	

Unit 6 Delinquency Prevention and Control

1. Which one would not be considered a juvenile delinquent?
- A. A thirteen-year-old runaway ____
- B. A ten-year-old beyond parental control ____
- C. A twenty-two year old who robs a store ____
- D. A nine-year-old who is continually truant ____

2. Which one is an incorrect statement?
- A. Juveniles and youths are frequently arrested for fraud, embezzlement, and vagrancy ____
- B. The percentage of arrests of juveniles and youths is increasing ____
- C. The number of juveniles and youths that are being arrested is increasing ____
- D. The number and percentage of youths being arrested is likely to increase in the future ____

3. When arresting a juvenile delinquent:
- A. An officer should not be very determined ____
- B. The handling of the case is almost the same as that of an adult offender ____
- C. Parents should not be notified immediately ____
- D. Parents should not be told all the facts relating to the unlawful behavior ____

4. Some juveniles commit crimes because:
- A. They do what a gang does ____
- B. They are frustrated by adults ____
- C. They see crime as a way of life ____
- D. All of the above ____

5. Which statement is correct?
- A. Internal factors, such as anxiety, fear, and curiosity are the cause of juvenile delinquency ____
- B. External factors, such as environment, are the cause of juvenile delinquency ____
- C. There appears to be no single cause for juvenile delinquency ____
- D. Most delinquents are interested in school and preparing for the future ____

6. The best promise toward control of delinquency is to:
- A. Reduce poor environmental influences ____
- B. Improve good environments ____
- C. Treat youths who have adopted delinquent behavior ____
- D. All of the above ____

7. When youths are taken into custody:
- A. The social worker must find out how and where the crime was committed ____
- B. The police must find out why the crime was committed ____
- C. The police must find out how, where and when the crime was committed ____
- D. The policeman and the social worker operate together to find out who committed the crime ____

8. A good police technique for preventing juvenile delinquency is:

A. To patrol and inspect frequently _____
B. To identify possible problem youths and areas _____
C. To work with other agencies to solve problems _____
D. All of the above _____

9. Which statement is incorrect?

A. The police usually make no effort to find jobs for youths _____
B. Policemen sometimes close streets for sledding and supervise skating areas in cold weather _____
C. The high crime rate does not allow enough time for police to conduct recreation programs _____
D. It is against police policy to send youths to other agencies which could help them _____

10. In youth correction:

A. Officers can question youths without the presence of parents _____
B. Parents must be present before while youths are being questioned _____
C. Youths do not have to be advised of their legal rights before questioning _____
D. Police must notify parents of minor incidents of which no record is made _____

11. Reports involving juvenile offenders should include:

A. Previous arrests _____
B. The possible risks to the juvenile and to the community _____
C. The ability of the parents to supervise _____
D. All of the above _____

12. Which is an incorrect statement?

A. Juveniles are not held accountable for breaking the law due to their immaturity _____
B. Juveniles are investigated in the same manner as adults _____
C. Officers may use force in handling juveniles if force is necessary _____
D. The handling of evidence in juvenlie and adult cases is the same _____

13. Gangs usually tend to give members:

A. A positive look toward the future _____
B. An increased desire to do better in school _____
C. Security and social approval _____
D. A desire to become better members of society _____

14. When dealing with tough gang leaders, it is best for a policeman to:

A. Embarrass them _____
B. Threaten them _____
C. Respect them _____
D. Insult them _____

Answer Key

1. C	4. D	7. C	10. A	13. C
2. A	5. C	8. D	11. D	14. C
3. B	6. D	9. B	12. A	

Project Staff

Patrick J. Weagraff, Ed. D. ..... Director
James J. Lynn, M.S. ..... Curriculum Specialist
Harold M. Blue ..... Editor
Karen Mason ..... Reproduction Typist

GPO 693-477/276

ACCESSION NUMBER: VT102226

PUBLICATION DATE: JUN75

TITLE: PREPARING FOR PUBLIC SERVICE OCCUPATIONS. SOCIAL SERVICES. CURRICULUM GUIDE.

DESCRIPTOR: *CAREER EDUCATION; *PUBLIC SERVICE OCCUPATIONS; *CURRICULUM GUIDES; ENTRY WORKERS; GRADE 11; GRADE 12; ADULT EDUCATION; *SOCIAL SERVICES

IDENTIFIER: CAREER PREPARATION; *SERVICE STATION ATTENDANTS

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 150P.; RELATED DOCUMENTS VT 102 220 THROUGH VT 102 226 IN THIS ISSUE.

ABSTRACT: THIS CURRICULUM GUIDE IS ONE OF A SERIES DEVELOPED AS PART OF THE PUBLIC SERVICE OCCUPATIONS CURRICULUM PROJECT TO ASSIST IN THE IMPLEMENTATION OF CAREER EDUCATION PROGRAMS CONCERNED WITH PUBLIC SERVICE OCCUPATIONS. THE GUIDE CONSISTS OF SEVEN UNITS, AND CONTAINS THE BASIC INSTRUCTIONAL MATERIAL RECOMMENDED FOR THE AREA OF SOCIAL AND ECONOMIC SERVICES PREPARATION. IT OFFERS SUGGESTIONS FOR COURSE CONTENT, TEACHING MATERIALS, AND INSTRUCTIONAL OBJECTIVES, AS WELL AS TEACHER AND STUDENT ACTIVITIES HELPFUL IN PREPARING INDIVIDUALS FOR SOCIAL AND ECONOMIC SERVICE ENTRY-LEVEL POSITIONS IN PUBLIC SERVICE OCCUPATIONS. THE SUBJECT MATTER IS ORIENTED TOWARD TEACHERS WITH MINIMAL TRAINING AND/OR EXPERIENCE IN PUBLIC SERVICE PREPARATION. UNIT HEADINGS ARE: SOCIAL-SERVICE AGENCIES AND PROGRAMS, WHY PEOPLE BEHAVE AS THEY DO, HOW GROUPS BEHAVE, WORKING WITH COMMUNITY ORGANIZATIONS AND GROUPS, INDIVIDUAL ASSISTANCE SKILLS, INFLUENCES ON PEOPLE, AND CROSS-CULTURAL SKILLS. APPENDED ARE A LIST OF RESOURCE SUPPLIERS AND SUGGESTED EVALUATION QUESTIONS FOR PRETESTS AND POSTTESTS. (AUTHOR/LJ)

CONTRACT NUMBER: OEG-0-71-4780(357)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402. (STOCK NUMBER 017-080-01434-3)

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. VOCATIONAL EDUCATION SECTION.

SPONSORING AGENCY NAME: BUREAU OF OCCUPATIONAL AND ADULT EDUCATION (DHEW/OE), WASHINGTON, D.C. DIV OF RESEARCH AND DEMONSTRATION.

VT 102 226

Preparing for Public Service Occupations

Social Services

Curriculum Guide

VT 102 226

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C., 20402

Stock No. 017-080-01434-3

Preparing for Public Service Occupations

Social Services

by:

California State Department
of Education
Vocational Education Section
Program Planning Unit
Sacramento, California 95814

in accordance with:

U.S. Office of Education
Bureau of Occupational and
Adult Education
Division of Research and
Demonstration
Curriculum Development Branch
Grant No. OEG-0-71-4780 (357)

June, 1975

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

LEGE ANCHORA VITAE

U.S.A.

This document is one of a series of curriculum guides dealing with the Public Service Occupations career cluster. The titles of all individually available documents in this series appear below:

- Exploration of Public Service Occupations
- Orientation to Public Service Occupations
- Preparing for Public Service Occupations—Common Core
- Preparing for Public Service Occupations—Educational Services
- Preparing for Public Service Occupations—Law Enforcement Services
- Preparing for Public Service Occupations—Social Services
- Administering Public Service Occupations—An Implementation Guide

The project presented or reported herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

Developed pursuant to grant No. OEG-0-71-4780
by the California State Department of Education
Vocational-Technical Education Curriculum Laboratory
Sacramento, California
Funded by the U.S. Office of Education under
Part I - Curriculum Development in Vocational and Technical Education
Vocational Education Amendments of 1968,
Public Law 90-576
1975

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FOREWORD

This *Social Services Career Education Curriculum Guide* is one of a series developed to assist those in implementing career education programs concerned with public service occupations. This Guide consists of seven units, and contains the basic instructional material recommended for the area of social and economic services preparation. It offers suggestions for course content, teaching materials, and instructional objectives, as well as teacher and student activities helpful in preparing individuals for Social and Economic Service entry-level positions in public service occupations.

The subject matter is oriented toward teachers with minimal training and/or experience in public service preparation. Units are presented in a sequential order; however, each is designed to stand alone as a separate body of knowledge.

Primary emphasis is on public service occupations preparation in the area of Social and Economic Services; however, other individuals may also want to utilize the information contained in this Guide.

All of the information is "suggested," and should be adapted to meet local conditions and needs.

A wide range of suggestions and approaches to the subject were received and, wherever possible, incorporated into the final document. Since the resulting materials represent many opinions, no approval or endorsement of any institution, organization, agency, or person should be inferred.

This Guide was prepared by the California State Department of Education, Vocational Education Section, Program Planning Unit, which is under the direction of E. David Graf. The major responsibility for the coordination of this Guide belongs to James J. Lynn, Curriculum Specialist, Public Service Occupations Curriculum Project.

Patrick J. Weagraff, Ed.D.
Project Director

ACKNOWLEDGEMENTS

The completion of this career education guide depended upon the assistance, advice, and cooperation of many individuals. The California State Department of Education, Vocational Education Section, Program Planning Unit, wishes to acknowledge in particular the contribution of the following individuals:

Victor A. Backstrom
Public Service Occupations Teacher
Long Beach, California

John Bunten, Senior Program Officer
Bureau of Adult and Vocational-Technical Education
San Francisco, California

Dr. William E. Burns
Professor of Education
State University College at Buffalo
Buffalo, New York

Dr. Clark Dobson, Associate Secretary
Association for Supervision and Curriculum Development/NEA
Washington, D.C.

Dr. Ronald Detrick
Director of Career Education
San Diego Unified School District
San Diego, California

Dr. Nevin Frantz
Assistant Professor of Education
University of Georgia
Athens, Georgia

Irvin Gartner
Associate Director
Berkeley Executive Seminar Center
Berkeley, California

Elmer George, Executive Director
Georgia Municipal Association
Atlanta, Georgia

Alfred W. Koch
Curriculum Coordinator
Rawlins Public Schools
Rawlins, Wyoming

Andrew S. Korim
Public Service Specialist
American Association of Junior Colleges
Washington, D.C.

Fred Martinez, Consultant
Education for the Disadvantaged
California State Department of Education
Sacramento, California

James B. Mayo, Coordinator
Fremont-Newark Regional
Occupational Program
Fremont, California

James J. McIlwrath, Consultant
Office of Program Evaluation
State Department of Education
Sacramento, California

Fred Miller, Chief
Public Service Institute
Department of Education
Harrisburg, Pennsylvania

Paul N. Peters, Manager
Career Education Task Force
State Department of Education
Sacramento, California

Mrs. Melba Williams
Georgia Municipal Association
Atlanta, Georgia

Dr. James Wykle
Education Program Specialist
U.S. Office of Education
Washington, D.C.

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Unit 1

SOCIAL SERVICE AGENCIES AND PROGRAMS

Here are the contents of the introductory unit to the Social-Service group. We suggest a careful reading of it before you read the text.

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Unit 1

SOCIAL SERVICE AGENCIES AND PROGRAMS

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the types of problems handled in social-service agencies.
2. Ability to describe the various goals and functions of social-service agencies.
3. Ability to determine the training and promotional opportunities for entry level positions in social-service agencies.
4. Ability to integrate the needs of clients of social agencies with the services rendered by these agencies.
5. Ability to use an understanding of client's feelings and behavior to form attitudes of empathy and concern for them.

CONTENT

INTRODUCTION

Whether they work in a large modern office in which hundreds of people are employed, or in a dingy storefront office, nearly all social-service aides provide services or assist in their actual delivery. They usually work in a social agency, or in a social-services department of an institution.

The provision of social services is the response of these agencies or departments to the requests for help of people, usually called *clients*, who have certain problems that they feel they cannot solve or handle without assistance. Usually, clients do not pay for these services. Instead, the need for services has been recognized by the community and financed primarily through taxes or (less frequently) through private donations.

Individuals preparing for work in the social and economic oc-

cupational group must recognize that social agencies primarily offer concrete or *bread-and-butter* services, such as money or housing, in addition to social aid in the form of talking, listening, or counseling. Actually, the two types of services (social and economic) are seldom entirely separate. For example, people often need considerable counseling when they apply for financial aid to a department of public assistance because they feel defeated, discouraged, or ashamed.

A social worker's primary task may be to help the clients prove their eligibility for assistance; typically, this means that they meet the various regulations spelling out the requirements. But the worker can also, by what he says, by the warmth he shows, and by his interest in the client as an individual, help him to feel better about himself and his problems.

PROBLEMS HANDLED BY SOCIAL-SERVICE AGENCIES

Types of problems for which clients seek social service aid are varied. Some of the most common handled by social agencies are problems of:

Housing, including apartment seeking, threatened or actual eviction, homelessness, overcrowding, high rent, and vermin or other unsanitary conditions;

Economics, including insufficient income, debts, garnishment, budgeting and money management;

Employment, including entry into job market; vocational or job training; employment barriers, such as physical handicaps, emotional illness, retardation, prison background, or drug abuse history;

Practical-personal relationships, including physical or mental health, physical handicaps, family planning, child care, school adjustment, out-of-wedlock pregnancy, police action, probation, or parole.

Interrelationships of Problems. Just knowing about housing, economic, or personal problems isn't enough. Social-service aides must try to understand the complex and interrelated patterns of factors that influence these problems. Troubles often seem to come together as a group of related problems. A breadwinner with a major problem of severe illness may lose his job, which will probably cause financial problems. He may, as a result of inability to go to work and support his family, become severely discouraged and depressed. His marital relationship may suffer, and the stability of his home may be threatened. His children, upset by changes in their

home life, may begin to have school problems, such as truancy or academic failure.

Problems such as these have to be considered in relation to such general social conditions as the availability of employment, racial and ethnic discrimination, or the quality of education. The lack of a high school diploma, for example, may or may not be a problem, depending on the availability and requirements of jobs in the community. In the past, there was much unskilled work available for persons with little education, but now greater skills and more education are required for many jobs.

Understanding problems also involves knowing how most people tend to handle the types of situations involved. The aide should be aware of what is considered *normal* (customary) behavior under the circumstances. For even if one respects the right of people to be different providing that they do no harm to others, their difference or deviance from the normal sometimes becomes a problem because of the way other people in the community regard such behavior. The behavior of certain groups of clients, such as newcomers from rural areas, may differ from that of the majority of city dwellers. It is important for social-service aides to recognize what behavior is considered normal among the group they serve. They should try to help clients handle problems that result from the differences between their customary behavior and that which the community expects.

AGENCY GOALS AND FUNCTIONS

Setting of Goals. Students preparing for a career in the social and economic services must have a clear understanding of the goals and functions of social-service agencies. Most social-service workers are employed in public social agencies which were established by local, state, or federal governments, probably as a result of some legislation. Although the staff has considerable leeway for making decisions concerning the everday administration of programs, the overall goals and policies are set by the laws that established the public agencies, and the employees may have to work toward goals that do not correspond with their own ideals.

Changing Goals. There may be and often are, distinct differences between the reasons for the agency's original establishment, and the goals that have been developed or set during its years of service. For example, some settlement houses may have been founded to help European immigrants adjust to American life. Now that the former newcomers and their children

have moved out of the neighborhood of original location, the settlement house is faced with the problem of either moving with them or serving new residents of the neighborhood. Because times have changed and the new groups have had different experiences before coming to the city, the settlement houses have to develop new goals if they are to adequately help a different clientele. Even if they move with the older groups, their goals would change because their former clients have changed. Such a situation can cause problems of serious nature. Sometimes an agency continues to hold onto its old aims when they are no longer suited to the problems in the community.

Long-range Goals. Agencies usually have long-range as well as immediate goals. For example, a public-assistance agency has as its immediate goal the provision of financial help for people who would otherwise be without income; but its long-range goal may be to help the clients become self-supporting. It is important to make this distinction. Sometimes these short- and long-term goals may be in conflict because allowances are so low and receiving them is so humiliating that people's health and self-respect suffer, giving the clients little incentive to seek work. As a result, they become less capable of the independence and self-support that is the goal of the agency. Most people in the social-work profession agree, however, that both long- and short-term goals can best be served by generous allowances offered in a spirit of respect and trust for the applicants.

Another example of the contrast between immediate and long-range goals is in the health field: an outpatient clinic may have the short-range goal of curing the present illness, but the long-range purpose of preventing sickness.

The Worker's Relationship to the Goals. It is important for social-service workers to remember that one often becomes so busy doing his daily tasks that he forgets why he is doing them. This is especially likely in big organizations or bureaucracies where the work is divided among many persons, each of whom performs only part of the service to a client. Social-service employees must continually ask themselves why they are performing certain tasks, and what immediate and ultimate effect their efforts will have on their clients and the community. The employee is more likely to perform his everyday tasks with enthusiasm and dedication if he is aware of the reasons for doing them, than if they become routine chores.

TYPES OF AGENCIES

Civil Service. In a public agency a voluntary group of citi-

zens may serve as an advisory board, but the day-to-day work is done by employees of city, county, state, or federal governments, whose employment is regulated by civil service. For each type of job in these agencies, persons are usually required to have certain *objective* qualifications, based on education and experience, rather than being appointed on the basis of *who they know*. Usually, they have to pass written examinations, to meet qualifications set by the local, state, or federal civil service commission, which has determined that these qualifications are necessary to perform a certain job.

One can understand how the qualities of social-service workers (who should, above all, be warm, friendly people, interested in others) would be hard to determine by such methods. It is also clear that the introduction of new workers, such as aides (who may have less formal education and job experience than others who formerly did their jobs), might be difficult to accomplish under civil service regulations. Of course, civil service was begun to assure fair-employment practices in government services, and to prevent jobs from being awarded on the basis of politcal friendship. But sometimes the qualifications that were set up for certain jobs have become fixed and unrelated to changing staff needs.

The rating and promotion of civil-service workers are usually conducted on the basis of the aforementioned objective criteria. Unfortunately, these sometimes exclude traits that are hard to measure, such as warmth, concern for clients, and assertiveness on behalf of clients. Civil-service examinations tend to emphasize factors that are easier to determine by tests, such as knowledge of rules and regulations, and correct use of agency forms.

Antipoverty Agencies. The recent increased awareness of the needs of the poor and of their right to have a voice in our society has led to extensive antipoverty legislation and to new agencies established with money granted under these laws. Most funds have been granted by the federal government to newly formed local groups rather than to established public or voluntary agencies. Often there is a requirement that the state and local governments contribute some financial or other support, but they, too, have often granted money directly to the new agencies rather than setting up new public agencies in the city or town. These new agencies are often operated under regulations other than those of civil service. Much of their initial flexibility was related to their newness, but in some cases, they have already begun to become rigid and divorced from the clients and problems for which they were intended. Sometimes another criticism has been made about these agencies - that their lack of strict regulations has led to an unprofessional approach to services.

Voluntary or Private Agencies. Public service agencies are not always run by the government. Some nonprofit agencies are run by voluntary or private citizen groups, which were created as a result of the concern of private citizens about certain social problems. Often they were formed to help solve problems that could not be met by public social welfare agencies.

Many of these voluntary agencies came into existence before the public agencies. Sometimes, their focus was changed when the government assumed major responsibility for the problems they had been designed to meet. While they have at least some support from private contributions, most also receive some government funds. Private agencies must meet public standards in programs for which they get public money, but the voluntary agencies are free to choose whom they want to serve and have greater flexibility in hiring staff. Private agencies do not use the civil service system. This leeway can mean that the private agencies are able to help some persons who would otherwise not be served, but it can also mean that these agencies are able to ignore those they do not wish to serve.

THE SOCIAL AGENCY STAFF

The quality of services offered by an agency depends to a great extent on the quality of its staff. Students should become aware of the qualifications and the assignments of the workers in social-service agencies. They should become familiar with the tasks and required training, education, and experience of supervisory staff, nonsupervisory professional workers, and social-service aides, as well as other kinds of personnel employed in social agencies.

The Aide and the Professional Staff. Aides usually have less formal education and often less job experience in a social agency than other personnel involved in offering services. For this reason, they may have certain problems in working with more highly trained staff.

His initial training, combined with that secured while on the job, will help the aide to become familiar with the social-service professions, as well as with his own particular assignment. Since he will be doing some tasks that others with more education have done in the past, there may be a feeling that the aide is less qualified than his predecessors were to accomplish the required tasks. The fact that some aides are able to form a cordial relationship with clients more easily than some professionals may also lead these professionals to resent some aides.

Some staff members in other agencies who are unfamiliar with

the services aides can perform may think the new aides know less than they do. Some staff members may be unwilling to work with aides on a case or feel uneasy about doing so. They may fail to recognize the aide's natural talents for the job, the training he has had on the job, and the supervision he is getting. It is the responsibility of the agency to make the status and abilities of the aides clear to workers in other agencies. Aides should feel free to ask their supervisor to pave the way for smooth working relationships with other agencies if this type of trouble exists. It is important for the student to be prepared for the possibility that there will be problems such as those mentioned, and to consider in advance how he will handle them.

One of the most important things for aides (and for all other social-service workers) is to know what the employee can and cannot do. An individual should know what he himself is qualified to do, and those items he must refer to others who have different skills, knowledge, or education. One basis of a good working relationship between professional and aide is mutual help. Aides can share with professionals their knowledge of the neighborhood and the client group, and professionals can share their knowledge and skills with aides.

Promotion in Social Agencies. People preparing to work in the social and economic group need to be aware of promotional opportunities in their occupational group, and to know how they can advance on the job.

Promotion by Training. One way to become a better worker and to get ahead is to get additional training. This can be accomplished either on the job (this is usually called *inservice training*) or at a vocational school, training institute, community college, or university.

In public agencies operated under laws that provide for staff improvement, tuition and living allowances may be offered for study outside the agency. It is to the benefit of the agency and to the general quality of social-services in the community when agencies assume responsibility for staff development and continuing education. It is also important that the aide should apply for any training and educational opportunities for which he could qualify.

Promotion by Merit or Experience. High-quality performance and/or length of time on the job may also be reasons for a promotion or a raise. In many instances, a combination of experience and education will count toward job promotion.

When the employee keeps the same job but gets more money for it, his changed status is usually called an *increment*.

Increments are sometimes awarded on the basis of quality of performance; at other times, all the workers in a particular job or category of employment get a raise. Many public service employees receive yearly increments or step increases in their salary.

Workers' Rights. As it is important to know how one can advance himself in the same job, so also the employee should acquaint himself with knowledge of other rights, or how to protect himself against unfair treatment (such as unfair evaluations of one's performance), as well as how to make use of this knowledge.

Workers' rights and opportunities are often obtained and protected by organized groups, such as unions, organizations of social-service workers (similar to professional associations), or nonunion staff organizations in a single agency.

THE QUALITY OF AGENCY SERVICES

Since social-service workers have a commitment (to work for the welfare of people) that goes beyond their loyalty to a job in any particular social agency, it is important for them to be able to tell when their agency or another agency is doing a good job. To evaluate a social agency, it is necessary to think about the goals themselves, as well as how they are being carried out, which always involves the quality of staff.

Relevance of Goals. Are the goals of an agency related to people's needs, or have they been forgotten in the hustle and bustle of doing business?

- Are people so busy protecting property in the public housing program that they forget that buildings were constructed for people to live in?
- Have public servants provided grass for children only to spend all their energy keeping children off it?
- Do you feel that even if the goals of the agency were accomplished, the important needs of people would not be met? For example, is the agency concerned primarily with children's recreation in settlement programs when there is a greater need to help them make better use of schooling through tutorial programs, field trips, and the like?

Adherence to Goals. Often the goals of an agency are sound, but the way services are performed prevents their achievement.

For example, few whose concern is for poor people could quarrel that it is good to relieve financial need. But when the amount of money granted is so low that recipients are still very needy, then the agency is not achieving its goals. Or, if allowances are fairly adequate, but people can only get them if they have lived in the city or state a certain period of years, then many needy people are not being helped. Unfortunately, people are no less needy because they have lived in a town only a few months.

The long-range goal of public assistance - the creation of self-reliance - may not be achieved when every penny of earnings is deducted from the public-assistance grant, and there is consequently no financial incentive to work. Or self-respect, an important ingredient in creating independence, may not be developed when the means test is used to determine eligibility. This test can be a humiliating blow to self-esteem.

Accountability to Public. One difficult thing about working in a public agency or one supported by public funds, such as antipoverty agencies, is that it is somewhat like working in a goldfish bowl. The public quite correctly feels it has a right to watch over all programs and to hold the agency and the staff accountable for them. In addition, legislators, newspaper reporters, and members of citizen groups frequently check to see that public agencies are doing what the law says they should. Sometimes these groups are not necessarily looking after the interests of the clients, but are, in fact, protecting their own monetary interests, raising such questions as, "Why do we have to pay high taxes to support welfare chiselers?"

Social-service agencies and their employees should be sensitive to the demands of the community they serve. They should try to be objective and see all sides. One can easily understand the conflict between professionals, who think they know what clients need; the taxpayers, who may not know in detail the reasons for social services; and the clients themselves, who may feel they know best what they need and how they should be helped. The new antipoverty agencies have tried to respond more to the needs of the poorer clients and to the problems as they are seen by the clients.

Quality of the Agency Staff. In thinking about agency staff, it is important to consider whether they are qualified to do the jobs they are assigned:

- Do agency requirements permit them to do their job?

- Is the task of the aide in the public-housing program that of a policeman, or is he to help create a decent atmosphere for living?

It may be that people meet all the agency requirements of education and experience, but still lack that concern for clients which is essential in any social-service job. Consider a local social-service agency in the community:

- Does the agency settle for staff that fall short of the standards it sets?
- Are there obvious lacks, such as workers' inability to speak the clients' language, or total unfamiliarity with the background and way of life of the clientele?
- Does the agency employ people from the neighborhood served, or who are members of the same ethnic group as the clients?
- If such persons are hired, are they used in showcase fashion, or do they actually help the agency to understand the clientele better and to be more aware of their problems?
- Do staff, no matter how well qualified, have enough time to serve clients adequately?

Making Decisions. One important question to ask about any social-service agency is how decisions are made. The professional staff, who have the training and experience to be able to contribute to policy- and program-planning, should have a role in making decisions. Questions to consider include:

- Are those workers directly involved with clients able to affect policy, or is everything decided by the administrative staff or persons further removed from service, such as a lay advisory group?
- Is the board influenced by the opinions of staff at all levels?

An important goal of social welfare is to increase the independence and self-respect of people; for this reason, many now consider it to be important that clients have a voice in agency affairs. If there is truly a belief in people's right to self-determination and in their worth, then it must also be understood that clients' views of what agencies should do are very important. It is now very generally agreed that people from the neighborhood and the client group should be on the advisory or policy-making board of the agency.

- What rights do clients have to protest or appeal agency decisions, such as the refusal of a housing authority to rent them an apartment, or a welfare department's decision to deny them financial aid or withdraw homemaking service?

- Is there an opportunity to question policy as well as the way it is interpreted? For example, if it is the agency's policy to deny housing to fatherless families, then it is this policy, rather than the refusal to house them, that a family headed by a female might want to appeal.

- Does the agency let clients know of their right to appeal decisions, or is this a right in name only?

Evaluating the Agency. Considering a particular local agency, try to answer the following important questions about any social agency:

- If it met its *goals*, would this agency be helping to meet the important needs of community residents? Which residents, the most needy or those better off?

- Do its *programs* come near to achieving its goals?

- What *say* do *clients* and *staff* (at various levels of authority) have in making its policies and programs, in appealing its decisions?

- Are *staff qualifications* and the *staff themselves* suitable for carrying out the goals and the program of the agency?

- Are there *aides* or *neighborhood workers* on the staff, and is their unique knowledge of the clients and their problems being tapped?

CLIENTS OF SOCIAL-SERVICE AGENCIES

Many clients of social-service agencies are disadvantaged. That is, they may lack income, have inadequate housing, and have serious problems in getting along with others. And, as a result of their community status, they often do not command respect from other members of the community, or (which is equally important) from themselves. Sometimes these individuals, and others, forget that the existence of their problems does not imply the lack of strengths. In fact, many disadvantaged clients are able to get by or to live with troubles which overwhelm many more fortunate people.

Reactions of Clients to Problems. It is the purpose of a social-service agency to reduce or lessen the disadvantages of its clients. For example, they offer cash, or (in some areas) food stamps when there is no money; or decent housing, when it is dilapidated.

The characteristics of clients (such as their racial or ethnic groups, their birth places and their education) influence not only the problems for which they need help, but affect their ability to use the help social agencies offer. A Negro client may be in need of financial help for many reasons related to his race, such as his birthplace in a rural area where schools, particularly for Negroes, were substandard, and where medical services were inadequate. As a Negro, even allowing for the fact that he is undereducated, he may have been discriminated against in the scramble for unskilled work. The poor housing to which he is often limited by his income and his race may affect his spirit or morale.

Reactions of Clients to the Social-Service Worker. Some of these conditions may even affect his ability to use help. This is particularly true if the social worker he sees is white, and he has been accustomed to hostile treatment by whites, even in social agencies. His suspicion may lead him to doubt the sincerity of the friendship, advice, or counsel which the worker offers, no matter how unprejudiced the worker is.

Indeed, it is important for the new social-service aide to recognize that the first reactions of clients to him are sometimes based on what the aide symbolizes, rather than what he is. The aide must, by his concern, willingness to help, and his skill, help his clients to overcome this resistance.

But, at the same time, it is important not to be insulted when clients are angry or unfriendly to social-service workers. They may expect that the aide will treat them as others have treated them in the past. The way individuals respond to others is based on their past experiences, and many social-service clients have had more than their share of bitter experiences.

Understanding the Clients' Attitudes and Behavior. The conditions or characteristics mentioned above affect all people, but they by no means mean the same thing to everyone. One family with low income may have more spirit, get along better with others and among themselves, and strive harder than another poor family. The reasons for this are complex; perhaps it is because they have been less poor for a shorter period of time, or for some other reason.

The Client's Understanding of the Problem. One of the most important characteristics of the social worker's way of viewing and helping people is the determination to understand the *meaning* that a circumstance, a behavior, or a problem has for the individual. What may seem to be bad housing to one client may seem adequate to another, such as a person who has lived in the worst slums of San Juan. It would be wrong to conclude

that the person from San Juan lacked ambition or motivation to get ahead - he has already shown enough of that when he left his home to come to the mainland, and he may have already considerably bettered himself in relation to what he had before.

The Client's Cultural Background. The worker must also be careful not to conclude that the way of life of poor persons, or persons who belong to minority groups, is necessarily different from those who are better off, and who belong to the majority race or ethnic groups. Some of their attitudes, beliefs, and behaviors, or what is called *culture*, may be different from those of the majority of people. On the other hand, other attitudes may be quite similar to those of the majority.

There will also be great differences in beliefs, behaviors, and attitudes among people who have common social characteristics. Most of the poor have seen the way people live on TV or in the ads. This middle-class life style is often quite different from their own. In fact, it is sometimes the difference between (on the one hand) what they want and others have, and (on the other hand) what they know they can get, that makes some bitter, hopeless, and down-and-out, with resulting frustration and lowered self-image.

Worker-Client Mutual Understanding. It is important to keep in mind some of the ways that people feel, and the results on their lives of not having what they consider to be enough money; of suffering racial discrimination; or of living in crowded and unsanitary housing. Understanding these feelings will give the aide or social worker advance clues as to what the client is enduring. Some notion of how conditions affect people may help aides to probe or to dig deeper, and thus to be aware of the client's true feelings, for he cannot be expected to reveal them immediately to a stranger.

Above all, social-service employees must strive for *empathy* in their work with clients. This means that aides should try to put themselves in their client's place. Aides should not feel sorry for them, but rather try to understand what it would feel like to be in their shoes. Part of developing empathy is avoiding the tendency to assume that the aide *knows* how *anybody* would feel about being poor or being a Negro. No one can tell exactly how someone else feels, but an aide can try to find out what it feels like to the person he is trying to help. He must not let the way he himself would feel get in the way of learning how the client feels about his problems.

THE SOCIAL SERVICES

Receiving Help. Being on the receiving end of a relationship

is a position common to social-service clients. Although it is the goal of the social agency to serve its clients, the client's dependence on aides and social workers is sometimes a problem in itself. If one has no money, then he must ask for public assistance in order to eat; but having to depend on a social agency for resources that most people get by themselves or from their family or close friends, is hard and sometimes humiliating. Different cultural beliefs may make it difficult to accept help.

Everyone is, to a certain extent dependent on circumstances beyond his control. A person's health sometimes fails, no matter how well he cares for himself; employment may not be available at a certain time or place; one's family may have emotional, mental, or physical problems. Indirectly, most people are influenced by forces outside themselves. For children to be dependent on their parents is natural; but for adults to be directly dependent on social agencies for the necessities of life, rather than to be dependent upon themselves or others with whom they have a close personal relationship, is likely to affect their self-esteem. Since the recipients of welfare services are often looked down on by the community, it is hard for them to feel comfortable about their dependence, even if they recognize that their need is not their fault. It is certainly a fact that many clients have less control over their lives than most people do, and that they are likely to feel weak and powerless.

Offering Help. To offer social services in such a way as to help people maintain their dignity is one of the social-service employee's most difficult and important tasks. To begin with, the worker must really believe in an individual's *right* to these services. Like other public service employees, his job is to *serve* his clients.

A knowledge of the development of these services tells us that social conditions and circumstances, rather than the individual, are largely responsible for the needs of people. It is hard in this society not to judge a man's worth by his pocketbook, but unless one respects his clients for their strengths, and unless one realizes that all people have dignity no matter how much life has worn them down, one really cannot aid them. For example, a middle-aged man who has supported his family all of his life and suddenly becomes too ill to work, can be helped to respect his past assumption of responsibilities, and to understand the ways in which he can continue to function as father and husband, if not breadwinner. If one is honest with himself, he will know how much luck, other persons, and general social conditions account for his own independence. The aide must realize that most people have been dependent in one way or another at some time in their lives.

In addition to offering help with respect and understanding for the client, there are ways of reducing his actual dependence on outside forces.

Organizations of clients and their supporters protect or assert the rights of clients. There are also organizations of welfare recipients, tenant councils, and local action groups that can help clients know their rights. Clients' participation on the advisory boards of social agencies is also a way of increasing their participation in the social-service activities. While it may not necessarily mean that clients have any more influence over the services - over eligibility regulations, levels of assistance, etc. - the presence in the agency at all staff levels of persons from their own income, racial, ethnic, or neighborhood group may reduce their feelings of being dependent on impersonal outsiders.

Awareness of the feelings that clients might have as a result of depending so greatly on outsiders may help social workers to understand behaviors that would otherwise seem mysterious. For example, a client may act as if he does not need the help a particular agency offers even when the aide knows he desperately requires it, or he may be resentful rather than grateful. He may behave this way because he thinks more gracious behavior would show how helpless he is. Acting as if he does not need help may be his way of denying to himself or simply to others how desperate he is. These actions are his way of holding on to his pride.

Cultural differences may account for part of his behavior. Sometimes his behavior will be carried to the extreme of refusing to ask for help - in which case one of the aide's tasks is to help him realize that it is a strength to seek help for himself and his family.

A worker should also realize that overly gracious behavior on the part of a client may be an attempt to hide his true feelings of resentment and embarrassment over dependence. With this knowledge of the client's feelings and behavior patterns, he can develop an attitude of empathy and concern for the client which will make the student a more effective employee in the social and economic occupational group.

STUDENT LEARNING ACTIVITIES

- Determine the short- and long-range goals of a local social-service agency in your community.
- Debate the following statement: *The primary goal of a social-service agency is to make every person fully independent.*
- Go to a local social-service agency in your community and obtain answers to these questions:

1. Was the agency established by federal, state, or local law? If not by any of the above, how was it established?
2. What are the sources of funds for this agency? Public, private, or combination of both?
3. How are clients selected?
4. How do the sources, availability of funds, and legislation, if any, affect the services of this agency?

- View and discuss films on social-service agencies, such as: *Social Work*, *What's the Answer to Slums*, or *The Welfare Revolt*.

- Evaluate a local social-service agency in your community in these areas:

  1. Are goals related to needs?
  2. Do programs reach goals?
  3. What say do clients and staff have in the agency?
  4. What are the educational and experience qualifications for the social-service staff?
  5. How are aides and neighborhood workers utilized?

- Write a short essay on the relationships between the needs of clients and the services rendered by employees in social-service agencies.

- List the social characteristics of the clientele at a local social-service agency. Include such factors as:

Income	Employment status
Race	Family composition
Ethnic group	Age
Education	Health
Housing	Birthplace

TEACHER MANAGEMENT ACTIVITIES

- Have the students identify the types of problems people handle in social-service agencies.

- Divide the class into small groups, and have them discuss the short- and long-range goals of various social-service agencies in your community.

- Establish teams to debate such statements as: *The primary goal of a social-service agency is to make every person fully independent.*

- Arrange to have a person or persons available at a local

social-service agency to talk to students about agency operations.

- Show such films on social services as: *Social Worker*, *What's the Answer to Slums*, or *The Welfare Revolt*. Encourage class discussion afterwards.

- Assign an essay on the relationships between the needs of clients and the services rendered by employees in social-service agencies.

- Have the students identify the social characteristics of the clientele at a local social-service agency.

RESOURCES

Poorhouse State: The American Way of Life on Public Assistance, Richard M. Elman, Delta Bell (Dell Publishing Co.),1968.

Toward Social Welfare: An Analysis of Programs and Proposals Attacking Poverty, Insecurity, and Inequality of Opportunity, C. Wilcox, Irwin-Dorsey, 1969.

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Using Teams to Deliver Social Services (Manpower Monograph No. 1), Robert L. Baker and Thomas L. Briggs, Syracuse University Press, 1960.

Social Worker (Film, color, 17 minutes, purchase), Universal Education Visual Arts, 1967.

Nonprofessionals in the Human Services, C. Grosser, et. al., Jossey-Bass, Inc., 1969.

Status: Achievement and Social Values, American Education Publication, 1971.

What's The Answer to Slums (Film, 15 minutes, color, rental), Institutional Cinema, 1969.

Diary of a Harlem Family (Movie, 16mm, reel, rental), Indiana University A-V Center, 1970.

Unit 2

WHY PEOPLE BEHAVE AS THEY DO

Here are the contents of Unit 2 of the Social-Services group. We suggest a careful reading of it before you read the text.

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Unit 2

WHY PEOPLE BEHAVE AS THEY DO

INSTRUCTIONAL OBJECTIVES

1. Ability to recognize that behavior is related to feelings.
2. Ability to understand and accept the feelings of others without undue prejudice or personal bias.
3. Ability to appreciate the relationships between the way human behavior is judged and the way the basic nature of man is perceived.
4. Ability to use oneself more effectively in working with people.
5. Ability to use the knowledge of human behavior to work with people more comfortably both on and off the job.
6. Ability to recognize the value of understanding human behavior to work toward personal happiness.
7. Ability to become more aware of patterns of behavior in working with co-workers or clients, in order to better understand and respond to problems that arise.

CONTENT

INTRODUCTION

Need to Understand Behavior. The field of public service requires the ability to work with many different individuals, including the general public. For the worker in public service to be most effective, he must be able to understand the behavior of others, as well as his own behavior. His relationships with co-workers, friends, instructors, and the public in general depend on his understanding of patterns of behavior, and on his ability to respond to problems as they arise.

The student should gain an understanding of the feelings which he has about himself and for others. Increasing his sensitivity to emotions of embarrassment, anxiety, dependence, helplessness, or fear, will better enable the student to work with the public.

What is Behavior? Behavior is what people do. It is a process of adaptation to one's environment, and is closely related to an individual's perceptions of the rewards resulting from his actions, as compared to the costs thereof. This perception is in turn influenced by the personal needs, desires, aspirations, and wants experienced by a person, and which affect value judgments concerning his behavior. The identification of personal values can assist teachers and students to deal more rationally with value issues as they relate to human behavior.

Evaluating Personal Values. One technique for examining personal values is the *Value Survey* developed by the social psychologist Milton Rokeach. (See Resources.) This is a simple method for measuring value priorities. The instrument contains 18 terminal values, including such goals as *a sense of accomplishment*, *family security*, and *true friendship*; and such instrumental values as *honesty*, *imagination*, and *self-control*. The students are asked to rank each set of values to form a value system, or an arrangement of values in order of importance to him.

Individual teachers may also find the survey proves a valuable personal experience. Effective teachers recognize the difference between their own value positions and those of students.

Instead of trying to indoctrinate students with a particular set of values, students should be encouraged to own and act upon their identified personal values.

Learning Behavior Patterns. Students are more enthusiastic today in their participation in programs that deal directly with feelings and attitudes and in discussion groups that force confrontation of personal value positions. Based upon such activities, an appreciation of human behavior patterns can be fostered in the students. Students can be better prepared for work in Social Service if they can be helped to develop an attitude that will enable them to understand human behavior, rather than to judge it. They must learn to understand what *causes* behavior, as opposed to the common notion that deviant or antisocial behavior springs from fundamental *badness* and *ornerineas*.

Since many students have themselves come into conflict with authority in school, learning more about their own personality and the reason for their behavior will insure that they will ultimately revise their self concepts to include greater self acceptance, which is one of the goals of the whole education program.

BEHAVIORAL TYPES

General Types of Behavior. Behavior patterns can begin to be understood by assuming that there are four basic types of behavioral processes:

- *Conditioned responses* - behavior resulting from fixed operation or habits, producing predictable responses;
- *Motor processes* - behavior developed through muscular coordination for countless non-skilled body movements, such as using precision, grace, or speed in accomplishing the behavior;
- *Verbal processes* - using a symbol system (language); for example, to communicate thoughts and feelings;
- *Conceptual-affective processes* - acquiring concepts and values through direct experience, and organizing them meaningfully to serve the individual's motives.

Feelings as Related to Behavior. Feelings have to do with the emotional side of man, with his sentiments, passions, and susceptibilities. The emotional nature of man is one of the most complex aspects of human behavior. There are three main aspects of this response:

- *Conscious experience* - the feeling of being happy, anxious, or afraid. These conscious aspects of emotion are of prime importance in our personal and social adjustment;
- *Physical response* - the physiological reaction to a strong feeling, such as fear or rage. This biological response involves coordinated muscular, chemical, glandular, and neural activities throughout the body;
- *Feelings as motives for behavior* - a life without *emotion* would literally be a life without *motion*. Feelings and emotion are directly related to behavior. A feeling is a reaction to a symbol or external stimulus, and is aroused within the individual in direct relation to the significance of the situation to him.

HUMAN BEHAVIOR INFLUENCING OUR LIVES

Behavior Influencing our Viewpoints of Others. Each of us, whether we realize it or not, forms a way of looking at man in general - a kind of philosophical viewpoint on human nature. This viewpoint has been determined by our personal value system and attitudes towards ourselves and others; value judgments which are tempered by our own way of accepting the central essence of man.

Let us now examine some different ways of looking at the basic nature of man:

- *Man is basically good* - This is an optimistic way of looking at man. It implies that his basic nature is to always to do good.
- *Man is basically evil* - This is the pessimistic viewpoint of man. Here man's basic nature is considered to be evil or *sinful*, and man must constantly struggle to overcome his evil nature. Certain religious overtones may play a role in this belief.
- *Man is neither basically good or evil, but a product of his heredity and training* - This viewpoint claims that man's behavior is entirely the result of heredity and environment working together to direct behavior and development.
- *Man is a combination of two or more of the above viewpoints* - for example, some social scientists believe that man is primarily a product of biological and environmental conditions, and that he also is basically good, or strives to do good deeds. The implication of believing in one of these viewpoints should be explored. As an example, say a teacher's aide thought that all humans were basically evil. How do you feel her way of looking at human behavior would effect the way in which she would interact with her students?

Understanding Behavior Patterns. In order to work toward personal happiness, and become more effective both on and off the job, the student must be helped to develop attitudes that will enable him to see the relationships between feelings and behavior. Some of the qualities involved in understanding behavior patterns are:

- *Sensitivity* - acceptance and awareness of the different ways people have of expressing their feelings - a necessity for students, particularly. Human behavior is a product of many experiences in different people.
- *Rapport* - getting along with others. Establishing a good rapport with co-workers will make work more pleasant and satisfying. There are several ways you can establish a good relationship with others:

Knowing what you are able to offer, and being able to express this clearly;

Listening actively to what is being said, and observing the outward feelings that accompany what is said;

Communicating the conviction that people can help themselves by improving their attitudes as well as deeds.

- *Acceptance* - the positive and active understanding of other's feelings; not a blind acceptance of everything someone does, but an awareness and belief that each person has a right to his own opinions.
- *Prejudice* - an emotionally toned prejudgment for or against a person, group of persons, or situations; as often displayed, an unfavorable and often hostile attitude toward the members of a different ethnic group or race. A public-service employee must constantly strive to wipe out all prejudice whenever and wherever it is apparent. The United States has been known as a *melting pot* of various national and racial groups, and as a country of religious and political freedom. Class distinctions are discouraged, however, in spite of legislation to prevent discrimination - it is a fact of life for many groups in America.

Prejudiced (Learned) Behavior Patterns. The fact that a particular form of prejudice, say Anti-Semitism, does *not* exist in all parts of the world suggests that prejudice is learned behavior. Very young children are usually completely unaware of differences of race or nationality. As the child grows up, however, he learns most of his prejudices through associations with prejudiced people. Any expression of a personal bias by a teacher will influence the attitudes of his or her students. On the other hand, education can certainly help form positive attitudes of acceptance towards people of different cultural or ethnic backgrounds. Prejudicial attitudes can take many forms:

- Racial or ethnic,
- Sexual stereotype,
- Religious,
- Job or housing discrimination,
- Educational level,
- Personal traits (weight, clothing, speech).

The issue in dealing with prejudice is based on decisions which are influenced by one's own perceptions, rather than on objective fact. Knowledge about other people or groups is often the first step in eliminating stereotyped ways of thinking, since there is a close relationship between intolerance and ignorance. Prolonged contact between different individuals or groups of people usually reduces prejudicial attitudes. This is why working in the field of public service, which is

itself a melting pot of persons from all areas of our society, is a positive step in elimination of irrational prejudice. Students might want to explore different expressions of prejudice in the field of social service.

As an example: a social-service aide believes that all Mexican-Americans are lazy and don't want to work. This worker is responsible for determining financial aid qualifications for individuals - what implications are there in providing fair service to all people, considering this aide's negative prejudicial attitude toward Mexican-Americans?

ASPECTS OF BEHAVIOR WITHIN SOCIAL-SERVICE OCCUPATIONS

There are certain kinds of behavior (confidentiality, actions on and off the job, and joining the establishment) of particular importance for workers in the field of social service:

Confidentiality. In working with the public it is very important to project an image of trust and confidence, and to assure people that confidential information will remain so.

Behavior on and off the job. Because of the nature of public service, one is constantly in the *public eye*. To the average citizen, the city employee represents his city, the state employee his state, etc. It is important, therefore, to consider:

- What effect will your after-hours activities have on your employment?
- What is discretion, and how is it used?
- What are the limitations on personal freedom - what responsibilities does freedom carry?
- What are the effects of possible *after-hours* demands on the behavior of persons working in public service?

Joining the Establishment.- Human behavior should be discussed in terms of what it means to the trainee himself, and what the implications of his actions are on the community, the people he deals with, and his employer. Does the trainee owe his allegiance to his employer or to his friends in the community?

The trainee is often in a bind. Part of his unique value lies in his relationships to, and knowledge of, the local population; part of his value comes from being a worker in public services. He is, in a sense, walking a tight rope between

the *establishment* and his friends and neighbors. What happens to his allegiance?

The young individual entering public service is a person in transition. Specific and unique problems accompany this role. The teacher and students need to define these special problems and determine alternate ways of handling them.

STUDENT LEARNING ACTIVITIES

- List four examples of people's feelings about asking for or receiving help from a social-service employee.
- Write a brief overview of the complexities of human behavior. Include some personal experiences.
- In a small-group discussion period, describe a personal value belief, include how you feel it affects your behavior.
- As a member of a small group, choose a way of looking at human behavior; for example: man is good, evil, neutral, or a combination of the three; and debate your viewpoint with different groups.
- Listen to experts in human behavior (such as counselors and psychologists) and be prepared to discuss main concepts of their fields.
- Discuss the natures and causes of prejudice and try to come up with solutions.
- Identify several demands on employees who work in social service which might not be made on employees in other fields.
- Write a short essay, and describe why understanding of human behavior will help to make a person a better public servant, both on and off the job.
- Through some form of part-time work experience in social service, use the knowledge and attitudes developed in this unit on behavior to understand people effectively as judged by your supervisor.

TEACHER MANAGEMENT ACTIVITIES

- Encourage students to discuss the questions and points presented; for example, the relationship of feelings to behavior.
- Have the class, in small groups, debate various ways of looking at human behavior (i.e., man is good, evil, neutral, or a combination of the three).

- Utilize local counselors or psychologists as resource persons to discuss human behavior.

- Show audio-visual programs on selected topics of behavior *(Seeds of Hate, An Examination of Prejudice)*, and have students discuss their attitudes and feelings on the topic.

- Using a role-play situation, have the students simulate some of the privileges and frustrations of different positions in social service.

- Plan writing activities to show how understanding human behavior can help trainees work in social-service more effectively.

- Bring social-service workers into class to discuss the relationship between behavior and getting along, on-and-off the job.

- If possible, arrange for some students to gain work experience in public service. Obtain feedback from the trainees' supervisors, and the trainees, on how well they are using their knowledge of behavior at work.

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Unit 3

HOW GROUPS BEHAVE

Here are the contents of Unit 3 of the Social-Services group. We suggest a careful reading of it before you read the text.

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- Group Role Playing
- Typical Groups to which People Belong
- Group Solidarity
- Group Membership
- Conformity with Group Values
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Unit 3

HOW GROUPS BEHAVE

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1. Ability to understand such group behavior as group communications, friendship relations, and leadership-followship patterns.
2. Ability to differentiate between membership groups and reference groups.
3. Ability to recognize both impediments and contributions to group dynamics.
4. Ability to understand and describe the concept of leadership as it relates to group processes.
5. Ability to perform in a group under different types of group leadership.
6. Ability to use an understanding of how groups behave for greater self-understanding.

CONTENT

INTRODUCTION

Those in public service can work more effectively if they understand the power of group loyalties in determining people's behavior in a disaster situation. For example, the social-service aide increases the togetherness of his client's families through his deepened knowledge of group leadership and cultural differences. The pre-school teacher's aide uses knowledge of group leadership and cultural differences to explore group conformity and productivity in the classroom.

Planning aides may bunch together and hold a brain-stroming session, in which creative ideas are fostered. Law enforcement officers need to know about the psychology of crowds.

The lesson is plain: public service employees need to acquire basic skills in understanding the individual within a group context.

This unit is designed to help the student acquire the necessary skills and attitudes to use his understanding of group processes both on and off the job. The content for this unit comes primarily from the behavioral sciences of psychology and sociology, and in particular in that area of overlap between the two called *social psychology*. For this, there is a simple definition: *Social psychology is the study of the bahavior of individuals in social or group contexts.*

This study of man and group processes has value in its own right, in providing knowledge basic to skills of effective group participation, and to effective participation in society. In addition to highlighting the major concepts of group dynamics, this unit will briefly explore the concept of leadership, the various types of group leadership, and the manner in which they affect group processes.

GROUPS

Types. There are two major types of groups: membership and reference:

Membership groups can be defined loosely as those groups to which one belongs (family, community), and *reference groups* (social, civic) as those to which one aspires. The distinction between these so-called *primary* and *secondary* groups is emphasized to point out the significance and influence of groups to which all people actually belong.

Group Role Playing. Reference groups exert considerable pressures on the individual which can shape behavior and attitudes as much as do membership groups, if not more so. A reference group is a group taken as a frame of reference for self evaluation and attitude formation. If the group one aspires to is considered to be more *important*, this can be described as aspiration toward *upward mobility*. There are very few people who cannot supply considerable illustrative material which would show how their peer group often has more influence on them in shaping behavior and attitudes than, for example, their family group.

These concepts can be easily illustrated by making concrete analogies to plays or motion pictures. People in real life, just like characters in a play, have *roles*. The various roles that individuals play are assigned different levels of importance by the group. In turn, these levels of importance

are referred to as *status*. For example, leaders have high status and newcomers have low status; many other roles are assumed by people in groups. How does the group support these roles - why does the group *need* them?

Typical Groups to Which People Belong

Some of the groups to which people belong are suggested below; perusal of this listing should afford some insight into one's own role:

Human Beings	Grades
Americans	Age Groups
Boys	Religious Groups
Girls	National Origin Groups (Irish, English, Italian, Russian, etc.)
Adults	
Children	Social Groups (Cub Scouts, Radio Club, dancing class, etc.)
Negroes	
Orientals	Sport Groups (baseball, football, basketball teams, etc.)
Caucasians	
Families	School Groups (reading or singing groups, clean-up committees, etc.)

Group Solidarity. It is not difficult to bring to mind groups that have considerable strength and solidarity. What are these groups like? It is equally easy to think of groups that have little usefulness, as a rule; which do not last very long; and are relatively ineffective. What are these groups like, and what are some of the reasons for their lack of effectiveness? Perhaps groups with strong emotional ties, and similar attitudes and beliefs work more closely together. In times of crisis or stress, groups exhibit considerable solidarity. What does this indicate about different methods of fostering cohesiveness?

Group Membership. In addition, written completion of the following questionnaire for the group you belong to will give an indication of methods of joining groups, and the consequent responsibilities of members:

EXAMPLE FOR	_____ GROUP	AS A MEMBER	
GROUP	HOW DO YOU JOIN?	YOU HAVE TO	YOU SHOULD
Family	Born into it Adoption Marriage	(These responses depend on the member: mother, father, daughter, son, oldest, youngest, grandparents, etc. A separate list for each may be made.)	
Grade	Finish ___ grade Be ___ years old	(These responses will depend on the class.)	
Americans	Born Naturalized		Not break laws Vote, etc.
Human Beings	Born		
Race: White Negroid etc.	Born (You might question the racial group of a child of a mixed marriage.)	(List for each group. If the class feels there are no *have to's* or *should's*, then leave blank.)	
Cub Scouts	Be a boy between ___ and ___ years old.	Take the Oath (which says ...	1. 2. 3. Wear Uniform
Radio Club			
Teams	Take Class		

Conformity with Group Values. A basic human requirement appears to be the need to confirm one's personal beliefs and opinions. In other words, to have other people agree with you. This need may teach individuals to conform to group values. Conformity in groups is exhibited not only in outward behavior; it may extend to the person's motives and attitudes and even to the way the individual thinks and perceives the world about him. Under conditions of group pressure, conformity is induced. The individual either gradually assumes the values of the group, or he will eventually leave the group.

The feelings or inclinations of many individuals have been opposed to those of the groups or organizations with which

Unit 2

WHY PEOPLE BEHAVE AS THEY DO

INSTRUCTIONAL OBJECTIVES

1. Ability to recognize that behavior is related to feelings.
2. Ability to understand and accept the feelings of others without undue prejudice or personal bias.
3. Ability to appreciate the relationships between the way human behavior is judged and the way the basic nature of man is perceived.
4. Ability to use oneself more effectively in working with people.
5. Ability to use the knowledge of human behavior to work with people more comfortably both on and off the job.
6. Ability to recognize the value of understanding human behavior to work toward personal happiness.
7. Ability to become more aware of patterns of behavior in working with co-workers or clients, in order to better understand and respond to problems that arise.

CONTENT

INTRODUCTION

Need to Understand Behavior. The field of public service requires the ability to work with many different individuals, including the general public. For the worker in public service to be most effective, he must be able to understand the behavior of others, as well as his own behavior. His relationships with co-workers, friends, instructors, and the public in general depend on his understanding of patterns of behavior, and on his ability to respond to problems as they arise.

The student should gain an understanding of the feelings which he has about himself and for others. Increasing his sensitivity to emotions of embarrassment, anxiety, dependence, helplessness, or fear, will better enable the student to work with the public.

What is Behavior? Behavior is what people do. It is a process of adaptation to one's environment, and is closely related to an individual's perceptions of the rewards resulting from his actions, as compared to the costs thereof. This perception is in turn influenced by the personal needs, desires, aspirations, and wants experienced by a person, and which affect value judgments concerning his behavior. The identification of personal values can assist teachers and students to deal more rationally with value issues as they relate to human behavior.

Evaluating Personal Values. One technique for examining personal values is the *Value Survey* developed by the social psychologist Milton Rokeach. (See Resources.) This is a simple method for measuring value priorities. The instrument contains 18 terminal values, including such goals as *a sense of accomplishment*, *family security*, and *true friendship*; and such instrumental values as *honesty*, *imagination*, and *self-control*. The students are asked to rank each set of values to form a value system, or an arrangement of values in order of importance to him.

Individual teachers may also find the survey proves a valuable personal experience. Effective teachers recognize the difference between their own value positions and those of students.

Instead of trying to indoctrinate students with a particular set of values, students should be encouraged to own and act upon their identified personal values.

Learning Behavior Patterns. Students are more enthusiastic today in their participation in programs that deal directly with feelings and attitudes and in discussion groups that force confrontation of personal value positions. Based upon such activities, an appreciation of human behavior patterns can be fostered in the students. Students can be better prepared for work in Social Service if they can be helped to develop an attitude that will enable them to understand human behavior, rather than to judge it. They must learn to understand what *causes* behavior, as opposed to the common notion that deviant or antisocial behavior springs from fundamental *badness* and *orneriness*.

Since many students have themselves come into conflict with authority in school, learning more about their own personality and the reason for their behavior will insure that they will ultimately revise their self concepts to include greater self acceptance, which is one of the goals of the whole education program.

BEHAVIORAL TYPES

General Types of Behavior. Behavior patterns can begin to be understood by assuming that there are four basic types of behavioral processes:

- *Conditioned responses* - behavior resulting from fixed operation or habits, producing predictable responses;
- *Motor processes* - behavior developed through muscular coordination for countless non-skilled body movements, such as using precision, grace, or speed in accomplishing the behavior;
- *Verbal processes* - using a symbol system (language); for example, to communicate thoughts and feelings;
- *Conceptual-affective processes* - acquiring concepts and values through direct experience, and organizing them meaningfully to serve the individual's motives.

Feelings as Related to Behavior. Feelings have to do with the emotional side of man, with his sentiments, passions, and susceptibilities. The emotional nature of man is one of the most complex aspects of human behavior. There are three main aspects of this response:

- *Conscious experience* - the feeling of being happy, anxious, or afraid. These conscious aspects of emotion are of prime importance in our personal and social adjustment;
- *Physical response* - the physiological reaction to a strong feeling, such as fear or rage. This biological response involves coordinated muscular, chemical, glandular, and neural activities throughout the body;
- *Feelings as motives for behavior* - a life without *emotion* would literally be a life without *motion*. Feelings and emotion are directly related to behavior. A feeling is a reaction to a symbol or external stimulus, and is aroused within the individual in direct relation to the significance of the situation to him.

HUMAN BEHAVIOR INFLUENCING OUR LIVES

Behavior Influencing our Viewpoints of Others. Each of us, whether we realize it or not, forms a way of looking at man in general - a kind of philosophical viewpoint on human nature. This viewpoint has been determined by our personal value system and attitudes towards ourselves and others; value judgments which are tempered by our own way of accepting the central essence of man.

Let us now examine some different ways of looking at the basic nature of man:

- *Man is basically good* - This is an optimistic way of looking at man. It implies that his basic nature is to always to do good.
- *Man is basically evil* - This is the pessimistic viewpoint of man. Here man's basic nature is considered to be evil or *sinful*, and man must constantly struggle to overcome his evil nature. Certain religious overtones may play a role in this belief.
- *Man is neither basically good or evil, but a product of his heredity and training* - This viewpoint claims that man's behavior is entirely the result of heredity and environment working together to direct behavior and development.
- *Man is a combination of two or more of the above viewpoints* - for example, some social scientists believe that man is primarily a product of biological and environmental conditions, and that he also is basically good, or strives to do good deeds. The implication of believing in one of these viewpoints should be explored. As an example, say a teacher's aide thought that all humans were basically evil. How do you feel her way of looking at human behavior would effect the way in which she would interact with her students?

Understanding Behavior Patterns. In order to work toward personal happiness, and become more effective both on and off the job, the student must be helped to develop attitudes that will enable him to see the relationships between feelings and behavior. Some of the qualities involved in understanding behavior patterns are:

- *Sensitivity* - acceptance and awareness of the different ways people have of expressing their feelings - a necessity for students, particularly. Human behavior is a product of many experiences in different people.
- *Rapport* - getting along with others. Establishing a good rapport with co-workers will make work more pleasant and satisfying. There are several ways you can establish a good relationship with others:

Knowing what you are able to offer, and being able to express this clearly;

Listening actively to what is being said, and observing the outward feelings that accompany what is said;

Communicating the conviction that people can help themselves by improving their attitudes as well as deeds.

- *Acceptance* - the positive and active understanding of other's feelings; not a blind acceptance of everything someone does, but an awareness and belief that each person has a right to his own opinions.
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Children	Social Groups (Cub Scouts, Radio Club, dancing class, etc.)
Negroes	
Orientals	Sport Groups (baseball, football, basketball teams, etc.)
Caucasians	
Families	School Groups (reading or singing groups, clean-up committees, etc.)

Group Solidarity. It is not difficult to bring to mind groups that have considerable strength and solidarity. What are these groups like? It is equally easy to think of groups that have little usefulness, as a rule; which do not last very long; and are relatively ineffective. What are these groups like, and what are some of the reasons for their lack of effectiveness? Perhaps groups with strong emotional ties, and similar attitudes and beliefs work more closely together. In times of crisis or stress, groups exhibit considerable solidarity. What does this indicate about different methods of fostering cohesiveness?

Group Membership. In addition, written completion of the following questionnaire for the group you belong to will give an indication of methods of joining groups, and the consequent responsibilities of members:

EXAMPLE FOR	_____ GROUP	AS A MEMBER	
GROUP	HOW DO YOU JOIN?	YOU HAVE TO	YOU SHOULD
Family	Born into it Adoption Marriage	(These responses depend on the member: mother, father, daughter, son, oldest, youngest, grandparents, etc. A separate list for each may be made.)	
Grade	Finish ___ grade Be ___ years old	(These responses will depend on the class.)	
Americans	Born Naturalized		Not break laws Vote, etc.
Human Beings	Born		
Race: White Negroid etc.	Born (You might question the racial group of a child of a mixed marriage.)	(List for each group. If the class feels there are no *have to's* or *should's*, then leave blank.)	
Cub Scouts	Be a boy between ___ and ___ years old.	Take the Oath (which says ... 1. 2. 3. Wear Uniform	
Radio Club			
Teams	Take Class		

Conformity with Group Values. A basic human requirement appears to be the need to confirm one's personal beliefs and opinions. In other words, to have other people agree with you. This need may teach individuals to conform to group values. Conformity in groups is exhibited not only in outward behavior; it may extend to the person's motives and attitudes and even to the way the individual thinks and perceives the world about him. Under conditions of group pressure, conformity is induced. The individual either gradually assumes the values of the group, or he will eventually leave the group.

The feelings or inclinations of many individuals have been opposed to those of the groups or organizations with which

they have been affiliated. Individuals may or may not have become consciously aware of the pressures exerted on them to bring their own feelings and behavior [illegible] line with those of the group. Studies have shown that even when the majority opinion of a group is contrary to what may be obvious, the individual will almost always yield to the majority pressure. Thus the mere assertion of majority opinion, without any effort to persuade, may lead susceptible individuals to agree with the majority, despite the fact that the individual's judgement would normally lead to opposite conclusions.

Group Communications. Groups that exist for any length of time appear to develop a typical communication pattern. This is evidenced by the fact that individuals in the group show consistency in the number of communications they receive, the number they initiate, and the content of the communications that they start. The more status an individual has, the more frequently he receives and initiates communications. Usually, however, people with the highest status are not the best liked. Also, the larger the size of the group, the greater the difference between the high and low communicators.

Another way for a group member to receive a lot of attention is to disagree with a group opinion or belief. A group dissenter may initially receive a large number of communications from other members. However, if his behavior is judged incorrigible, he is likely to then receive a minimum of communications. For example, if an individual violently disagrees with an important group belief, the others may at first try to convince him, or put pressure on him to conform. After awhile, if this does not work, the dissenter may be left out of meetings, ignored, or ostracized.

Effect of Friendships on Group Communications. Friends communicate more with friends than with nonfriends. In general, communications are likely to be directed toward high-status persons, friends, or toward persons of equal status. Thus, status does affect not only the kind and quality of communication in a group situation, but also the effectiveness of group activity.

Further evidence will be found in the following discussion of group processes and leadership.

GROUP LEADERSHIP

Society could not function without people who can exert influence, initiate ideas, organize and formulate goals, and inspire others. Just as individual groups need a leader, combined groups need a leading group. Leadership is necessary

because, without it, group processes would not be able to function.

Essentials for Leadership. These concepts are essential to effective leadership:

- The leader increases his acceptability to the group by constantly mixing with its members. He maintains his group membership by interchanging personal services with them, seldom dominating the group.
- The leader sets clear group goals. He defines his duties along with those of the group. He organizes and stimulates production, prodding the group whenever necessary for greater achievement.
- The leader optimizes the amount of communication among members of the group. He gives information, and seeks it from group members. He creates an environment that is favorable to group communication, making it easier to get the work done.

Functions of Leaders. Essentially, good leaders formulate and dramatize objectives. They do this by creating group morale, and stimulating members to work together in a common task. The leader is a rallying center for group action.

The second general function of a leader is the administrative or executive role. He plans the program or goals, arranges for a division of labor, and marks out the lines of authority. The leader must inspire and direct.

To the extent an individual is successful in accomplishing both of these functions (and only to that extent), he is effective. Ideally, a good leader would be able to both inspire and direct at the same time. The difficulty involved in accomplishing this may partially explain why there is a constant need for good leaders, managers, and supervisors in the working world.

Styles of Leadership. These three distinct styles of leadership have been identified by social psychologists:

Authoritarian Leadership. The leader who determines all policy and dictates the steps necessary to accomplish goals is an authoritarian leader. He wants his authority known, and will not hesitate to use force to succeed. Often these leaders have been given their authority by law, and were not chosen by the group. The authoritarian leader supervises work closely and keeps everyone busy. He will tend to be personal in his

praise and criticism of the work of each member, but will remain separate from group work except when demonstrating.

Democratic Leadership. The leader who allows policy to be determined by group discussion and decision, and encourages communication, is a democratic leader. He will often use bargaining or cooperative methods so that everyone gains satisfaction in accomplishing tasks. The democratic leader will call for a vote to guide group action.

Group members are free to work with whomever they choose, and the division of tasks is left up to the group. He is more objective in his praise or criticism of individuals, and tries to be a regular group member in spirit, although not doing too much of the work.

Laissez-faire Leadership. Laissez-faire comes from the French word meaning - "to let do." Accordingly, a laissez-faire leader lets the group do whatever they want. Laisses-faire leadership is *hands off* leadership - complete freedom for the group or individual. This type of leader does not participate in the group project; he does, however, provide information if asked. Praise or criticism comes in infrequent and spontaneous occasions, with no set pattern of evaluation.

Group Atmospheres Created by Leadership Styles. Important implications for group processes arise out of the type of leadership style used.

The Authoritarian Style produces two general atmospheres. The first is an *aggressive authoritarian atmosphere* in which the individuals are competitive and hostile. They may blame work failures on others *(scapegoating)* and display a high degree of discontent. Although work does get done in this atmosphere, it often gets disrupted if the leader leaves the work area.

The second response to the authoritarian leader is the *submissive authoritarian atmosphere*. Here there is no rebellion, the workers go about their chores in a quiet and mechanical way. The work gets done, but with little play or loafing. Little discontent is expressed by these group members.

The *democratic atmosphere* is characterized by a high level of friendly behavior toward the leader and toward other members of the group. Work is carried on a reasonable level, with a strong *"we"* attitude to get the job done. People seem to be happy while working together.

The *laissez-faire atmosphere* produces results which are similar to the authoritarian style in the sense that good morale is not usually created in such a group, and discontent, together with hostile behavior toward other group members, often results.

It seems that frustration can result from no direction, as well as from too much direction. Mutual interferences are likely to disrupt laissez-faire groups, producing group tensions and lowered morale.

Leadership Training. Leadership can be learned - everyone isn't a born leader. Some important characteristics have been identified which help predict those who will make good leaders, and those who will not. Most effective leaders have these characteristics:

- *Social awareness* - they are aware of the feelings, opinions, and attitudes of the group members.
- *Ability to think* - there is a high correlation between intelligence and leadership.
- *Emotional stability* - they have warm, friendly personalities, free of insecurity and anxiety.

Depending upon the type of leader desired, and the particular situation, the kind of leadership training needed will vary. The retraining of leaders or managers can also be accomplished.

Many public service agencies have special management training programs for individuals who assume management positions. In addition, particular agencies may send their newly promoted managers to outside agencies or schools for management training.

STUDENT LEARNING ACTIVITIES

- List at least eight different kinds of groups.
- Identify distinguishing characteristics of membership groups and reference groups.
- In small groups, discuss how group pressures and values might inhibit or facilitate communication.
- Write an essay on the role of status in relation to the amount of communication an individual might receive in a group.
- View and discuss films on group processes, such as: *What Will Patty Do?, Group Pressure, Anatomy of a Group, Diagnosing Group Operation.*
- Role-play the various types of leadership styles by simulating an authoritarian, democratic, and laissez-faire group leader.
- Discuss how a particular leadership style might affect group communications.

- Develop a list of the three most important characteristics of a group leader.
- Listen to taped conversations of leaders (for example *Citizenship Processes* or *World Personalities: World Leaders*), and discuss the effectiveness of their leadership styles.
- Debate the following statement: "Leaders cannot both inspire and direct at the same time."

TEACHER MANAGEMENT ACTIVITIES

- Have the students develop individual lists of various groups.
- Provide examples of membership groups and reference groups, and discuss the differences and simularities between them.
- Encourage discussion on such points as group pressures and values.
- Show films on group processes, such as: *What Will Patty Do?, Group Pressure, Anatomy of a Group, Diagnosing Group Operation.*
- Assign written exercises on the role of status and its affect on group communication.
- Arrange role-playing exercises on leadership styles - authoritarian, democratic, and laissez-faire.
- Encourage small group discussion on the type of group atmosphere a particular leadership style evokes.
- Discuss with the class the concept that leadership style affects group communications.
- Divide the class into small groups and have each group come up with its own list of the three most important characteristics of effective leaders.
- Present taped conversation of different leadership styles: for example, *Citizenship Processes* or *World Personalities: World Leaders*, and discuss the effectiveness of their leadership styles.
- While listening to role-playing exercises of different leadership styles, use a rating sheet to evaluate the effectiveness of each leader. Encourage the students to use rating sheets, too.

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Unit 4

WORKING WITH COMMUNITY ORGANIZATIONS AND GROUPS

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Unit 4

WORKING WITH COMMUNITY ORGANIZATIONS AND GROUPS

INSTRUCTIONAL OBJECTIVES

1. Ability to identify the various types of community work performed by social-service aides.
2. Ability to understand how to recruit clients for a social-service agency.
3. Ability to recognize the importance of acquiring knowledge of the community in order to work more effectively as a social-service aide.
4. Ability to define the relationship between social-service aides and community groups.
5. Ability to acquire the necessary skills to successfully conduct a community meeting.
6. Ability to help community groups solve their own problems.
7. Ability to use an understanding of community organizations and groups to work with them more effectively as social-service aides.

CONTENT

INTRODUCTION

There are two major types of activities for social-service aides in the community. First, the aide attempts to spread knowledge of agency services and to increase their use by community residents eligible for them. In addition, the aide learns how community persons feel about agency services and relays his findings to the agency staff. Together, these two activities make up what has been called the bridge function of the aide - the linking together of residents in the community and social services.

Another part of the aide's community work is to gather support from individuals and groups, or to help them develop the strength to make certain changes in community conditions and services. Here the aide is involved in social action.

INCREASING COMMUNITY ACCEPTANCE OF AGENCY SERVICES

Reaching the Appropriate People. Many persons are unaware of the services that are available to them, particularly in poor communities. A mother may want to work but may be unable to do so because she has no reliable, well-qualified person to care for her children. She may not know that there are day-care services in the neighborhood for which her children would be eligible. On the other hand, the problem may be a lack of sufficient day-care centers in a community, in which case community residents may be helped to take action to secure such services.

There are several important tasks involved in spreading the word about community services:

- An aide needs to *know as much about the services* as an intake worker who explains them to the client applying for help - who is eligible, what exactly is offered, the hours when service is offered, etc.

- An aide needs to *know who* in the community needs but seems not to be using services. This involves finding out the most efficient way to reach as many people as possible, preferably in groups rather than individually. Are they likely to belong to groups, and if so, what kind?

It makes no sense to go to a parent-teachers meeting at a school to explain what legal services are available to poor persons when the people who need them most do not attend such meetings. They may not belong to any official, organized groups, but may perhaps be members of social groups that exist mainly for mutual benefit, such as a home-town club or a card club. Their only affiliation may be as members of churches; perhaps, only small storefront churches, rather than with the established larger church groups.

Finally, those who most need information about services may be unaffiliated with any groups or gatherings. If the persons the social-service aide is trying to reach belong to informal groups, he will have to speak to the group in a way that is most likely to be understood by the members. This will involve knowing something about the group and the usual way that people talk and act in it. If the persons are unaffiliated, the aide will have to find the best ways of getting the message to them in their homes or on the street.

Gaining Knowledge of the Community. Part of getting to work in the community is getting to know about it. The aide may be a resident of this neighborhood, and even have been hired as an aide partly because of his knowledge of it and his contacts with other community residents. But even so, the aide needs to take a look at the community from his new position as an aide.

For example, he may have been active in educational affairs and may be informed about educational problems, and about groups interested in improving education and persons who have the ability to make decisions, or who have status in the field of education. If the aide's job is concerned with welfare, housing, or recreational facilities, he will need to find out about different individual groups, and those people who are involved and who have influence in these other fields.

Learning about Problems. Depending on the aide's assignment, he may have to get in touch with organized groups in the community that are interested in some of the problems the agency wishes him to work on; reach all groups in order to inform persons about agency services; or recruit persons who are probably unaffiliated with groups but who need to be reached. The social-service aide will also need to know something about how to get things done in this particular community, such as which legislators are likely to be helpful with what type of community problems. In addition to whatever the worker knows about the community already and what information his agency possesses, the aide should be familiar with some methods of gaining these kinds of information.

Learning from Groups. The aide may be able to find out about established groups and something about community problems from neighborhood associations, to which many groups belong. Such organizations are often interested in a variety of community problems.

There may be a citywide health and welfare council that coordinates the work of all agencies and groups interested in welfare problems. A council may be able to put the aide in touch with local groups involved in the problem.

There are certain citywide groups interested in problems, such as housing, civil rights, and education, and these may be sources of information about problems, perhaps even on a neighborhood basis. They may also be able to put the aide in touch with local people who are concerned with these problems.

There may be a local social agency, a local university, or an agency concerned with social research that has made a study of community problems and conditions, and can supply the worker with facts about the problems he is working on.

Finally, the aide must be out in the community, talking with people on street corners and park benches, interviewing shopkeepers, meeting people who congregate at the corner grocery, talking with clients and their friends, and observing the activities of youngsters, the use of playgrounds, the conditions of housing, and the like.

A balanced knowledge, based on personal observation and perhaps on his own experience as a resident, and on factual information (if it is available), is a desirable foundation for community work.

Putting Knowledge to Work. Learning about the community, its people, its groups, and its problems is a continuous process, partly because there is a great deal to learn, and partly because there is much change. As the aide works, he may become a specialist in certain areas, such as housing, recreation, and police protection.

But, for the most part, the social-service aide will be a generalist, a *jack-of-all-trades*. The worker must not only keep informed about the community through his contact with the people and groups in it - from clients to community leaders - but he must also keep abreast of local, regional, national, and even world events that may influence his work. If the mayor announces that his office will find jobs for youngsters this summer, the aide will want to be the first to know, so that he can quickly let neighborhood persons know how they can take advantage of this opportunity. If Congress is considering a housing bill, the aide may wnat to bring this to the attention of community groups and urge that they either support or oppose it.

This sounds like a big job - and it is. No one will expect the beginning aide in public service work to have these skills and abilities immediately. But the aide's work and training should aim him in this direction. One can never know all there is to know about particular problems, much less about a number of problems. The new aide should therefore develop ways of learning how to get information and where to find and how to use the skills of specialists, experts, and consultants in his community.

One of the aide's major resources is, of course, his supervisor and other experts in his agency.

Relationship of the Aide to Community Groups. The relationship between the aide and community groups depends on the nature of his assignment, characteristics of the groups served, the aide's own style of working, and other factors.

For example, if the aide is trying to recruit clients or to

establish a pressure group to work for quicker responses to housing-code violations, he may have to act as an organizer. He will have an active role, and will persuade, urge, and convince. If he attends a meeting to explain his agency's services or a certain policy of the agency, he will be a guest speaker and will try to relate to the group as he has observed others doing. This active role is suitable to the aide, who may be a community resident and who can be expected, more than the professional who is an outsider, to understand the needs of the community.

Frequently, the professional community worker has been an enabler, one who helps the group to function better, but who usually does not assume a leadership role. He encourages organization, helps to smooth relations between members, gathers needed information, etc. The idea is to encourage the group to be independent of the worker, to develop its own leadership, and to make its own decisions and plans. Sometimes, aides will be enablers, too.

Probably the new worker will find himself playing a number of these roles, often with the same group. As he begins assignments and as work progresses, he will need to determine which roles will be most helpful to the community group in achieving its goals.

Delivering the Message to Community Persons. Obviously, public service agencies should not and probably cannot be linked with people unless their services are genuinely needed by the people. One often speaks of clients as being *unmotivated* to use agencies, when perhaps they fail to use services because the services are not as useful as they might be. It is the job of the aide, who serves as bridge between the agencies and the community, to inform agency staff of the attitudes of community residents toward services.

The Community - Agency Bridge. There will probably be established procedures in most public service agencies for passing on what an aide learns to those persons in a position to make changes in the agency. The new worker should learn these procedures carefully, and never fail to report what he has learned from individuals and groups. In turn, he should not fail to report back to community residents the results of his efforts. If the aide seems to ignore their opinions, they will gradually cease to think it worthwhile to let him know how they feel. An aide's request for their comments will have seemed a mere courtesy rather than purposeful.

It may be that the agency could make a change but chooses not to, or is not in a position to make the changes which are requested. Even if the worker is on the side of some of the

community persons, he must accurately and immediately relay the message to them, informing them of whatever rights they have to appeal the policies of social agencies.

Adherence to Agency Policy. The aide must be careful to remember that, no matter how strongly he disagrees with agency policy, he is an agency employee. An aide's role is to make his opinions and those of others known to agency administrators and perhaps to join other staff members in attempting to influence these decisions. It is not the aide's role to work against the agency as if he were a community resident, rather than a staff member. It is very hard to keep these roles straight, especially when the aide is a community resident himself and has much in common with the persons who are criticizing the agency. Above all, the aide should avoid giving community persons false hope by confusing his understanding of their position with his ability to get something done about it.

Dialogue Between Community and Agency. Community persons may criticize certain things about agency services that are within the power of agency officials to change. For example, they may let the aide know that services would be more widely used if there were evening hours, or if there were translators for persons who speak a foreign language. These types of changes may be made by administrators, and probably would require no new laws or decisions by elected officials, such as the mayor or governor. The agency staff may even be able to modify public housing policies, such as those that deny apartments to women who have illegitimate children. Obviously, some of the objections raised by community residents are more likely to be greeted with a positive response than others.

There are other types of needed changes in community services that the agency staff cannot make and that therefore require enough community support to influence legislators or other government officials.

It may be that services are not so much under-used as insufficient. Community residents can be encouraged to take action that will lead to increased services, such as collecting signatures on a petition for presentation to an elected official, writing letters to the newspaper, organizing a march in support of the measure, or sending a delegation to Washington or the state capital. The choice of action plan depends upon what goes on in the community, the type of changes sought, the steps already taken, etc., to name a few considerations.

It may be that the desired action is not directly related to the aide's agency but very much influences how his agency services are used. For example, although the new aide may be on the staff of the welfare department, he still may be able to

assist community residents in securing better housing, since they can hardly be led toward greater personal and financial independence (the goal of income maintenance programs) if they are being dragged down by deteriorated housing. Or the aide may advocate changes in shopping facilities because he knows that high prices and inferior merchandise make it harder for welfare clients, as well as other poor people, to get by.

Bringing about changes in community conditions and services not directly affected by his agency may be a less difficult role for the aide than for the professional, partly because it is less likely to involve the kinds of conflict of interest that we have been mentioning above.

SKILLS IMPORTANT TO COMMUNITY WORK

In this discussion, it is impossible to cover all the skills required of the social-service aide who works in the community. Many of these he will have already developed as a citizen, parent, or active participant in his community. Since most community work involves formal or informal participation in meetings, this discussion will deal primarily with the aide's behavior in regard to meetings, as well as with some steps that might be taken by a group to solve a community problem.

The Aide and His Participation in Meetings.

Setting Up a Meeting. If a social-service aide is asked to set up a meeting, here is a checklist of things he should do:

- Does everyone know where and when the meeting is being held? Have reminders been sent out or calls made?
- Are there enough seats for everyone? A place for hats and coats?
- Are there name tags or cards for each person? Are there blank tags and a marker for the names of people who come unexpectedly? If there are no tags, is there another way for people to be introduced to each other?
- Are there copies of the agenda for everyone? If not, can it be put on a big poster or blackboard? Is there room on the agenda for topics to be added by the group?
- Are there people who can interpret or translate for those who speak a different language?
- Will someone be selected to take notes at the meeting, so that decisions and discussions are not lost?
- Will a report of the meeting be sent to each person who attended? To others who couldn't come?

- Does the aide have printed material from his agency to hand out? If not, is he prepared to tell the group members what they need to know about the agency's services?
- Is the aide prepared to introduce himself to the group? To tell them something about himself?
- Have other people been helped to participate in the meetings? Have they been supplied with information and given a chance to discuss or even practice their part?

Obviously, some of these items may not apply to the kind of group the aide is working with or to the type of meeting that will be held. There may be some other considerations, such as child-care arrangements, if it is important for mothers to attend.

Getting People to Come to a Meeting. Getting people to come to a meeting can be a very difficult job. The aide may be asked to recruit people and get them interested. This may mean going from door to door, or talking with people in supermarkets, laundromats, bars, churches, etc. If he has friends in the community, the aide can ask them to help him. If he doesn't have friends there, he should try to get to know people he has seen once or twice, particularly his clients in individual services.

People will be more likely to come to a meeting if a friend asks them to go. Calling on a person lets him know that the worker is interested in him as a person. It gives him the feeling that if he comes to the meeting he will not be a stranger - he will at least know one other person, the aide himself.

A personal visit is more likely to get results than a phone call or a postcard. Phone and mail contacts are helpful reminders after a personal visit or contact has been made. Of course, it will not always be possible to see each person individually. A committee composed of people who have already indicated their willingness to attend can be used to attract more people. Sometimes, if the aide knows one person in a building or on a block, he can get him to ask his neighbors. People are more likely to come if they are invited by someone they know well and can trust. When an aide can get people to help him encourage attendance, the chances for a successful meeting are increased.

Goals of a First Meeting. Certain things need to happen at the first meeting of a group if it is to be successful in launching its program:

- People should get acquainted and exchange points of view.
- Group members should agree on what they will tackle first.

- The group should agree on how it will tackle the program.
- People should be given responsibilities for working on the problem.
- The group should agree on the time and place for the next meeting.
- The members should make plans for bringing in other people who need to be involved in the next meeting.

If the Aide is Chairman. In some instances, the social-service aide may have to run the first meeting. If this happens, the aide should let the group know that he is taking this responsibility only until the group has an opportunity to select its own chairman. As temporary chairman, the worker should keep certain things in mind:

- Try to create an informal atmosphere where people feel free to talk and exchange ideas in a friendly way.
- Try to provide a sense of direction so that members will see that the meeting is getting somewhere.
- Ask questions which help to make other people's remarks clearer.
- Summarize from time to time.
- Suggest that the group consider one idea at a time.
- Bring people back to the topic if they get off the track.
- If other members are able to do some of these things, let them. This means they are on the way to taking over the group themselves.

The Agenda. It is a good idea to start out with an agenda (a written list of things to be discussed). The agenda can be made up in advance of the meeting by the aide, or preferably, by a committee of members. Copies of the agenda should be available to everyone who comes to the meeting. This helps people to stick to the topics and gives them an idea of what will happen next.

However, the agenda should not keep people from discussing other topics; it should not interfere with the flexibility to deal with new problems as they arise.

Observing a Meeting. Observing a meeting is important for sev-

eral reasons. First, it helps the social-service aide develop the skills needed to organize a meeting. It may also give the aide some clues of the manner in which certain groups or certain community residents behave at meetings. If he has to participate in a meeting, the aide can better gear his remarks to their accustomed style. It would be helpful for the aide to attend a variety of community meetings as an observer with his supervisor, or with a person who is experienced in running or helping to organize meetings. In this way, the aide can ask questions on the spot.

Here are some of the things to look for when observing a meeting; they more or less suggest some guidelines for a successful meeting, as well:

- Were people friendly or unfriendly? Was there much talk among people before the meeting started? Did guests and new members feel welcome?
- Was the meeting of a suitable length, or too long? (Meetings are seldom too short!)
- Was there a written agenda? Did everyone get a copy? Was there an orderly presentation of business?
- Did the officers seem well prepared?
- Did everyone get a chance to have his say, or did one or two people dominate the meeting?
- Did members have an opportunity to propose and vote on their own motions, or was action already decided by the officers?
- Were things accomplished? Were decisions made or left undecided?
- Were decisions railroaded through without sufficient time for members to think about what was at stake?
- Were people chosen or elected to do jobs and report at the next meeting?
- Did the discussion stick to the matter at hand and move toward a solution?
- Was there an agency worker present? What was his role? Did he take over the meeting or did he let the chairman run the meeting?
- Did he step in at the right times to help the members over the rough spots, offer advice, information, etc.?

These are only a few things to keep in mind when observing a meeting.

WORKING WITH THE GROUP

Keeping a Group Going. Here are some ways of keeping a group going, or of holding the members' interest, enthusiasm, and belief in the value of group efforts to solve community problems:

- The more people involved in the planning and leadership group, the more likely it will be an active group. Members lose interest in a one-man organization. If a number of people are contributing leadership, the skills, interests, and resources available to the group are that much greater.

- Seeing a problem through and then moving on to another one, perhaps of more importance, not only maintains interest but increases involvement in community affairs.

- Making the first project one that will succeed will help maintain interest and confidence in the organization.

- Taking time at the end of a meeting to plan for the next meeting is a good way to get people interested in the next meeting, or in coming again.

- Bringing new people into the group helps members feel that it is worthwhile being part of the group. New people bring new ideas, too.

- The agenda should make sense to the group and should be easy to follow.

- Time should be planned so that all members can take part in discussions. People bring their own concerns with them to meetings, and will often use a meeting as a place for *letting off steam.*

- Members should take increasing amounts of responsibility for the group as time goes on. Social-service aides should be available for advice and direction, but leadership should usually be passed on to the members.

Helping a Group Solve a Problem. Social-service aides can insure that a group works together to solve a community problem by following at least the simple steps discussed below, provided they are dealing with simple problems; problems that do not involve much conflict or controversy, such as the one used as an illustration. Although many beginning social-service aides will be working on problems which may be more complicated and more controversial, the steps outlined can help them

to focus on how to go about helping a group. But simply following these steps will not insure success. Success, in its fullest sense, depends on many factors, some beyond the aide's control.

- *Help the group to spell out the problem* -- Fifth and Elm is a dangerous corner; there are too many accidents there; we need to do something about it.

- *Make sure everyone understands the problem clearly* -- Does everyone know where Fifth and Elm is? Can you prove that it's a dangerous corner? What facts and figures do you have? What information do you need to make the problem clear? How do you go about getting this information?

- *Help group members decide what result they want* -- The group wants the corner to be safe at all times.

- *Think of ways to solve the problem* -- Put in a traffic light; put up a STOP sign; make the area a play street closed to traffic; post a policeman at the corner.

- *Check each possible solution and decide which is the best* --

  A traffic light requires more money to install than a STOP sign and the city is likely to be in favor of something less costly;

  If the street is made a play street, the problem is solved only during the day, the business establishments on the block would oppose this move, and their support could be helpful for a different solution;

  A policeman would only be posted during heavy traffic hours. The danger is there full-time.

- *Select the best solution* -- A STOP sign seems the best way to handle this situation and the one most likely to be acceptable.

- *Plan and organize for action* -- How does the group ask for a traffic sign to be installed? Who inows the procedures? What information is needed to support the request? Who should be asked to help with the group's effort? Who will be in charge of what? What will the timetable be for the various steps? Do we have an alternative plan if we are turned down?

- *Evaluate progress as you go along* -- What steps should be taken according to the plan of action? What steps have been taken? What have been the results? If something didn't work, why didn't it? What changes in plans have to be made as a result of what has happened?

- *Follow-up on the action* -- Are people carrying out their responsibilities on time? If the city said it would act, has it done so? Has the group sent letters of thanks to people who were helpful? What did the group learn about getting things done? What should be done differently next time? What was satisfying? What wasn't satisfying? Why?

One should realize that people who work in social and economic services perform a very important job. Some of what has been written here will not apply to everyone, or to every public-service agency providing social and economic services to individuals and groups. However, one should gain an appreciation for the need to work with community organizations and groups in order to provide meaningful services to people in need.

STUDENT LEARNING ACTIVITIES

- List the various types of community work performed by social-service aides.
- View films on urban communities, such as *The Changing City*, and *How to Live in a City*, and discuss why social-service aides should know about urban communities to be more effective as an aide.
- Participate in a serious game (for example, *Simulation Games: Ghetto*) to recognize the importance of trying to understand clients feelings and attitudes.
- Use case studies (for example, *A Camel is a Horse Designed by a Committee*, *Progress City*, or *The Aide Meets Success*) to better understand the role of social-service aide in working with community organizations and groups.
- In small groups, discuss the relationship of the social-service aide to the community group he serves.
- Prepare a notebook outlining specific strategies you would use to recruit clients for a social-service agency.
- Role-play as a social-service aide setting up a meeting. Use your class as the community group.
- Write a one-page outline showing the problem-solving steps you would utilize to help a community group solve a problem.

TEACHER MANAGEMENT ACTIVITIES

- Discuss with the class the various types of work performed by social-service aides in public service agencies.
- Discuss the problem solving steps an aide might use to help a community group solve a problem.
- Have the class prepare a notebook containing specific tech-

niques or strategies that could be used to recruit clients for a social-service agency.

- Show films on urban communities, such as *The Changing City*, or *How to Live in a City*, and discuss social-service aide effectiveness afterwards.

- Organize the class into small groups for discussion purposes of such topics as *Attitudes of Aides*, *Community-Aide Relationship*, or *Community Meeting Procedure*.

- Have the students role-play as a community group. Assign different students to act as the social-service aide setting up the group meeting.

- Organize the playing of a serious game (for example, *Simulation Games: Ghetto*) as a springboard for class discussion of feelings and attitudes on working with community organizations and groups.

- Assign case studies of community action programs; for example, *A Camel is a Horse Designed by a Committee*, *Progress City*, or *The Aide Meets Success*. Allow the students to report their findings orally.

RESOURCES

- The Changing City (Film 16mm, reel, purchase), Churchill Films, 1970.

- How to Live in a City (Film, 16mm, reel, rental), Indiana University A-V Center, 1970.

- Community Power Structure, Floyd Hunter, Doubleday and Company, Inc., Anchor Books Editions, 1963.

- Community (Film, 16mm, reel, rental), Indiana University A-V Center, 1970.

- How to Conduct a Community Action Meeting (brochure), N. J. Community Action Training Institute.

- Robert's Rules of Order, Henry M. Robert, F.H. Revell Company, 1967.

- Case Studies Available from the New Jersey Community Action Institute, Trenton, N.J.:

  Neighborhood Area Service Centers

  Progress City

  Neighborhood Centers As A Tool for Community Action

  The Aide Meets Success

  Organizing A Rural Group

Unit 5

INDIVIDUAL ASSISTANCE SKILLS

Here are the contents of Unit 5 of the Social-Services group. We suggest a careful reading of it before you read the text.

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Unit 5

INDIVIDUAL ASSISTANCE SKILLS

INSTRUCTIONAL OBJECTIVES

1. Ability to form positive attitudes concerning the provision of individual assistance skills to social-agency clients.
2. Ability to recognize the effect jargon and nonverbal communication have on the social aide-client relationship.
3. Ability to demonstrate a knowledge of interviewing skills used by social-service workers.
4. Ability to acquire a sensitivity to the various factors that affect an aide's relationship with a client.
5. Ability to outline the importance of different individual assistance skills used by social-service aides.
6. Ability, as a potential social-service worker, to show a concern for the feelings of clients.

CONTENT

INTRODUCTION

Within the limitations of space of this document, it is not practical to discuss in depth every possible kind of skill a social-service worker might need to provide services to individuals and families; nor is it feasible to describe how to do every task an aide might be called upon to perform during his career in social service. However, anyone who is competent and satisfied in this field must have an openness to new learning and must actively seek the new knowledge, information, and skills that enable him to do his job. Once an aide begins work, the supervisor is the closest, day-to-day source of help to him. Inservice training courses will help the new employee to develop greater competence. The aide should know which

things he can do best. There will be other skills with which he is less comfortable and less competent. These skills are the ones for which he should seek immediate help.

ATTITUDES TO CLIENTS

Attitudes influence everything one does. Attitudes affect not only beliefs and principles but plans of action as well. Attitudes form and shape an individual's value system.

Attitude of Service. In order to be helpful, the aide must believe in the client's right to service, and the manner of providing service must be one that shows respect for the client's right and ability to make his own choices.

The aide's study of the development of social welfare should have helped him to acquire an appreciation of social responsibility for human needs and of the rights of persons seeking help from the community. An aide is not doing a client a favor when he helps him, and he should not expect the client's gratitude or thanks. Service to individuals is the social-service employee's job.

Attitudes of Interest. Attitudes cannot be concealed from others; they are apparent in the way people treat one another.

Most people can recall an incident, perhaps in a large public clinic, an income-tax office, or the complaint desk of a department store, where he quickly got the feeling that there was little hope of getting what he wanted, and that the "no" would come swiftly and coldly. He did not expect to be understood, nor even to have the opportunity to fully explain his side of the story. He got this feeling partly because of experiences he had before - and social-service clients have had loads of these experiences - and because this situation resembled others where the answer was a quick "no." Workers were ambling around the office chatting with one another, or perhaps sitting at their desks having coffee while he waited, seemingly by the hour.

Contrast this experience with another, perhaps in the same office, where the worker came out promptly, or sent someone else to tell the client that she would see him within a certain length of time. When the worker greeted the client for the first time, she had an attitude of interest that made this a satisfying contact even if the client did not get exactly what he came for.

Importance of First Contact. From the individual client's

point of view, the first person to see him represents the agency and affects the client's view of the agency from that time on. As was suggested in the example just given, the basic requirement of the first contact is to convey an interest in the client himself and in his problem. This interest should be accompanied by a calm but by no means uncaring manner - with an air of assurance which will give the client a feeling that things can be worked out and that there is no need for him to panic.

Uniqueness of Each Person and Problem. Aides are often selected because of their natural concern for people and their ability to convey that interest to people. But it is easy to become bogged down during the day's work and to treat someone as if he and his problem were a routine matter. Remember that no one's problem is ever routine to him. One way for an aide to maintain a basic attitude of interest is to remind himself that there is no routine person or problem. Every problem is unique and has its own little twist.

The Aide and His Own Problems. It is extremely difficult to concentrate fully on someone else's problems if the aide himself is burdened or preoccupied with his own. It may sometimes become difficult for an aide to come to work without his problems or without forgetting them for the time he is on the job. It might be in the best interest of the clients if he stayed at home that day.

COMMUNICATIONS WITH CLIENTS

Those who plan to work in social and economic services must realize that they live in an age of communication. Words and pictures are sent around the globe in seconds. But unless people understand what is being sent or said, they will never understand each other. There is a great difference between expressing a meaning and communicating a meaning. It is not enough for the worker's words to be understood; it is vital that they be understood as they were meant.

Words with Different Meanings. It is easy to forget that the same words have different meanings to people of different backgrounds. Then, too, it is often not the words, so much as the implication of the words, that must be made clear. As an example, consider the different meanings which the phrase "lower class" has to social workers and their clients. To the professional, it has a particular factual meaning; it refers to persons with low income, and limited formal education. To others, especially those who find themselves referred to as "lower class," it may suggest or imply inferiority, poor moral standards, and inadequacy. The use of this phrase should, obviously, be quite limited.

Use of Jargon. The use of specialized words and terms that are peculiar to a special field or type of training is called *jargon*. Every job, trade, or profession develops a jargon of its own. Persons who use these terms every day often forget that they may sound strange and confusing to others. As an aide works with professionals from many different fields, and with people from different agencies, he will soon pick up much of this language. When (or if) it is used, he should be sure that others know what he is saying; he should always make an effort to be understood and to speak clearly. Social-service workers should not assume that people will accept them just because they use certain jargon. An aide may not sound as "professional" as some of his co-workers, but it is most unprofessional to use jargon improperly.

Likewise, while an aide should always try to understand the meaning of clients' language, he should not use it himself unless he feels comfortable doing so.

A related problem is the tendency in social and other public agencies to refer to programs and agencies by letters - AFDC for "Aid to Families with Dependent Children," for example. This may be a convenient shortcut in the office, but do not assume that clients or persons in other fields will know what they mean.

Unspoken Communication. Sometimes misunderstandings arise not from what is said, but from what is not said. Inner feelings or attitudes often show through in looks, gestures, or tone of voice. This so-called *body language* is a form of nonverbal communication. A person may be very angry, and though he tries hard not to show it, his anger often makes itself known to the person he is talking to, not by words, but in such ways as an angry look or a clenched fist. The person who is angry is sometimes not aware that his listener is picking up the hidden message he is sending out. People are extremely sensitive to these nonverbal or unspoken forms of communication.

If an aide finds that he is having trouble getting through to people, it may be that he is sending out hidden messages, indicating anger, unfriendliness, or a patronizing or "looking down" attitude. The people the aide is trying to reach might be responding to these inner feelings rather than to his words. All effective communication depends to a great extent on the worker knowing how he really feels, not on how he thinks he should feel.

INTERVIEWING CLIENTS

Much, in fact most, of what one does as a social-service aide may be considered interviewing, though not all talking with

people can be thought of as interviewing. If an aide meets a client on the street by chance and stops to chat about the weather, he would not think of that conversation as an interview. Nor would he need, in this chance meeting, to necessarily act as a worker and discuss the client's problems. On the other hand, aides must not think that they have to be in the office or have an appointment with a client in order to offer services. If the client had something important on his mind, the aide might be passing up an important opportunity to help if he refused to act as the worker in a chance meeting.

Listening. Listening is one of the fundamental skills in interviewing. The first step in becoming a more effective listener is to relax. By letting the client talk, the worker gets an idea of how to formulate questions that the client should be asked, and also learns how to phrase questions and statements so the client will understand. Even if the aide's primary task is to get answers to a set of questions, he can probably learn most by letting the client talk rather freely at first. The client will usually answer many questions before they are asked. What he says and the way he says it may often suggest the proper way of approaching him for additional information.

Response to Client. One way for the aide to be sure he has understood what the client is telling him is to *feedback* what he thinks the client said, thus giving the client a chance to correct the aide or to change what he said. However if the aide's feedback is critical of the client's behavior, then the client may change what he says to please the aide, although he will not necessarily mean what he says. On the other hand, the aide's criticism may make the client feel that he has to explain and justify his statements or his behavior in order to protect himself.

The aide may not like some of the behavior of some of his clients. At this point, understanding individual differences in value systems becomes very important. The aide can like the client or be interested in helping him without approving of all his actions. If a client feels he cannot tell an aide what he actually feels or does without being criticized, the worker will not be able to help him.

If the aide is critical, he may stifle the client's communicative ability, and the aide will not know whether the client is revising his statements in order to make the aide understand, or because he feels the aide wants him to or will not like him, otherwise. If he changes his statement to agree with what the social service aide wants, the new version will not truly reflect what he thinks.

Client's Release of Pent-Up Feelings. Most people have experienced a need at one time or another to release pent-up feelings. Clients in social-service agencies are no exception to this rule. Sometimes, before the client can examine the facts of his situation, he may have to air his feelings or let off emotional steam. Once his feelings are out in the open, he can more honestly examine them, and his views of himself or his problems may become more realistic. The worker should encourage the client to express his true feelings. The way people feel is a fact for them, and an aide cannot change feelings by telling people they should not feel that way.

Asking Questions. Since most of the services offered by social and economic agencies are based on accurate accumulation and understanding of the facts and feelings presented by the client, social-service workers need to get as clear an understanding as possible. As previously brought out, there are many questions that do not need to be asked at all, since people will disclose them naturally, if given the opportunity to talk. This will happen quite often because of emotional pressure of the moment.

In the first interview, an aide's listening should be keyed to getting the answers to certain questions: why the person came to the agency; the problem he thought the agency could help with; what the problem is from his point of view; and the solution that he seeks. No matter how freely the client expresses himslef, the aide will usually have to ask some questions in order to clarify for himself, as well as for the client, the client's problem and the help he expects to get.

Probing vs. Prying. It takes a lot of self-control to ask only those questions that are related to giving the client the help he needs, rather than following some interesting sideline in the client's story. One needs to be careful to distinguish between *probing* (asking questions in order to get additional facts that we need) and *prying* (everyone knows what that is). One of the topics most often subjected to prying is that of the client's marital relationship. Thus, if a mother comes to the agency to request help in getting additional clothing for children in school, and happens to mention that her husband is not much help in disciplining the children since he is *running around*, the aide must not get sidetracked on the husband-wife relationship. Instead, the aide should try to deal with the immediate problem presented by the client. In future contacts, it may become important to ask questions about the marital problem, depending on the husband's problems, the agency's program, and the aide's assignment.

A social-service aide's sensitivity to the feelings of other people should help him to word questions in such a way that they are asked tactfully. The aide's manner, tone of voice,

and intent in asking the question are more important than the exact way it is phrased. As often as possible the aide must ask questions in such a way as to leave the client's pride and self-esteem intact.

For example, a social-service aide is interviewing an unemployed man whom he suspects is a heavy drinker. The aide needs to make some judgment of how much of a problem his drinking is in order to offer the most suitable service. The aide might ask, *"About how much do you drink per day?"* Thus, the aide accepts the fact that the client drinks, and eliminates the need for him either to confess that he drinks or to make excuses about his drinking.

Focusing on the Problem. A good general rule is to ask questions for two purposes: to obtain specifically needed information, and to direct the client's conversation into fruitful channels.

This may seem to contradict the statement previously made about listening. But the aide is listening for a purpose. He will try to understand what the client is asking so he can be given help.

Sometimes it is necessary to help the client refocus on the main reason he came to the agency. An effective aide can get him back on the track with questions and with comments. Sometimes the only difference between questions and comments is in the inflection or pitch of the interviewer's voice. The aide's questions and comments can be a restatement of what he has said. They also enable the interviewer to ask, in effect, *"What happened next?"* For example, when the unemployed man explains how he was misused at the employment office, the aide can make a brief comment sharing or supporting his indignation over this treatment. By doing this, the aide is then in a position to ask further questions about the rest of what he needs to be told.

RELATIONSHIP WITH THE CLIENT

Everything said about communication, attitudes, listening, asking questions, and commenting forms the basis of the social-service aide's relationship with a client. *The relationship must be one of mutual confidence and cooperation.* For the psychologist and some other professionals, the relationship, in and of itself, may have great importance. But for the social-service worker, the relationship is formed for the purpose of offering the client a service.

Effect of Agency. How much confidence and cooperation really exists between the client and the worker depends to some extent

upon the kind of agency in which service is offered. Workers employed by locally-run antipoverty or other *grass-roots* organizations can expect the most confidence and cooperation, since the client has some say (at least through his representatives) in how the agency is run. In more authoritarian agencies, such as the courts or correctional institutions, in which the client is offered services not by his own choice but because someone considers him a problem or feels that he has a problem, the client may not be fully cooperative. The beginning social-service aide must not be disappointed when this is the case.

It is the worker's responsibility to set the limits of the relationship so that the client will not be deceived into thinking that the worker can do more than his agency will permit him to do. For example, if a tenant in a public-housing project is considered a problem by the management, it would be unfair of the aide to accept confidences of the client concerning illegal activities or other infringements of housing rules and regulations that the aide might need to report or use against the tenant.

Competition Among Workers. In most social and economic service agencies, there are several types of staff involved in contact with clients. Where there are social-service aides and professional social workers, issues frequently arise about who has the *best* relationship with the client - who knows most about the client, who understands the client best, or who the client feels more comfortable with. Such rivalry is not helpful to the client.

A home-visiting aide, for example, can become more friendly with a client than the caseworker who sees the client only for a short interval at a time. But there is no need for rivalry or jealousy between the aide and the caseworker. The services of each should complement those of the other. The client is not private property. *Workers on all levels need to share insights with one another to offer better service to clients.*

INTAKE AND SCREENING FUNCTIONS

Intake, screening, and information services are important individual assistance skills to acquire. In all of these, the social-service aide will probably be the first worker in the agency to greet the client. The client's confidence in the agency's ability to help him will to a great extent depend upon how the aide handles this first contact. All that has been said about establishing rapport, listening, showing interest and concern, apply here.

Intake Forms. Most public-service agencies have some kind of form to be filled out by the intake worker, or by the client, when agency contact is begun. The questions on the form can be useful in helping the worker to direct conversation in such a way that the needed information can be obtained. It is to the worker's advantage to be thoroughly familiar with the form so that he or she can ask questions in the order that they make sense in the interview, rather than the order in which they are listed on the form. Also, the worker may find it helpful to *translate* some of the phrases used on the form so that the client can answer more carefully, if the client is actually involved in filling out the forms himself.

If the client group is non-English-speaking, then the forms the clients use should be in the language of the clients. In any dynamic agency, the worker can feel free to bring this suggestion to his supervisor and to expect that the agency will want its forms to be useful rather than a hindrance in serving clients. Clients will also feel much more at ease and welcome if an agency has made the effort to *speak their language* in this way. In these small ways, as well as in larger areas, agencies communicate their genuine concern for clients.

Identifying the Problem. In addition to setting the tone for the client's future relationship with the agency, the aide will need to develop the ability to quickly determine the nature of the problem the client presents, and to make a judgment about what the next steps for himself and the clients are. This is not an easy thing to do, since the problem presented, like so many problems, may lead in many directions.

For example, the aide may be faced with a *crisis*, such as a family's eviction because of nonpayment of rent due to the father's recent hospitalization for a terminal illness (one that will take his life). The children, the aide quickly learns, have not been able to attend school. The mother comes to the social service and talks in depressed tones. She is worried about the fact that the children are missing school - probably because she cannot face the more grave problems of her husband's expected death and their homelessness. In this situation, the client needs help in pulling herself together and getting herself going again. She must have assistance in focusing on her problems, one at a time, starting with the most serious, or those requiring immediate attention. It will be obvious to the worker that this client is overwhelmed by the seriousness of her very difficult problems. And, recognizing that she is at a standstill, the worker needs to become more active and involved in making plans and carrying them out than he would be if the client were better able to cope with the problems by herself, or with just a little help.

Themes and Clues. Generally, the aide will be responsible for offering help with the problems for which the client requests aid. No matter how involved the story, there is a certain recurring theme - a topic that the client keeps returning to. This theme is usually the worker's clue as to what the client needs or expects. Of course, the other main clue is what the client actually says he wants. The client's definition of a problem is important in offering service.

Helping the Client Find the Solution. If a person develops his own plan for solving, or at least dealing with, a problem, he is more likely to feel he wants to carry it out. If he can think out loud with someone he sees as being interested, understanding, helpful, and uncritical, then he will feel better able to explore possible solutions to his problem.

One way to develop a plan for dealing with a problem is ask the client to think of several ways in which the problem could be handled. The aide could help the client to clarify his possible solutions. Then the aide might get the client to imagine for himself some of the outcomes or effects of each solution. If the client makes the choice himself from among several alternatives, he is more likely to act or to carry out the plan. It is then his plan rather than the plan of the aide.

INFORMATION GIVING

Explaining Agency Function. When an aide and a client both have a clear understanding about the problem and the possible help available, it is then the worker's role to interpret or tell the client what the agency can do and how it goes about providing services. The client is not interested in everything the agency does - just those services which would be helpful to him. Don't bother him with a complete description of what the agency does.

It goes without saying that the worker who does *intake interviewing* must be well aware of the services provided by the agency. That worker must know what the policies of the agency are; who is eligible and under what conditions; how long it takes to get services or whether there is a waiting list; and whether there is any additional information the agency will need to collect from other persons or organizations. He must find out these facts in order to know whether a client is eligible, or whether the agency is able to help him.

Reducing Red Tape in Emergencies. In the case example of the family with the dying father facing eviction, the worker, being sensitive to the strain that the mother is under, would

not burder her further with a recitation or rules and regulations about the agency services. Chances are the worker would immediately begin to help the mother qualify for emergency financial and housing assistance, if the worker's agency could offer such help. Otherwise, the worker would help her to get such services from another agency by referring her to that agency.

The worker would short-cut as much red tape as possible. This might include helping her make out the necessary forms to apply for financial help, and to prove that she and her family are in need. In this case, the worker would not give her the forms to take home and return at some later time. Many of the questions on the forms would have already been answered in discussing the problem so that the worker would need only to check the facts that he does not remember and those that were not discussed.

The worker should know which facts require proof or verification other than the client's statement and from what sources this information is available and acceptable to the agency. From among the various ways that this proof can be obtained, the worker should be able to help the client choose the easiest one for him.

In the case example being discussed, the worker might call the hospital to learn the details of the husband's condition from the social-service worker assigned to the ward or department in which he is being treated. Or, if that is not possible, the aide might write a letter to the hospital asking for the needed information in order to make it easier for the client to complete the application and supply the missing facts.

While the worker is dealing mostly with the problem presented by the client, that of getting the family rehoused, she might call the school and inform teachers of the problem, reassuring them that the children will be helped to get back to school. Thus the aide may help to prevent other problems from occuring.

REFERRAL TO OTHER AGENCIES

Reasons for Referral. A future social-service aide will probably need to help many clients to use other social agencies. Some clients may not be eligible for the services, or they may have problems that are not handled by the particular agency from which they are seeking help.

A social agency and its staff have a responsibility for helping people with problems that are not the primary work of the agency. Their problems are no smaller because they are ineligible for aid or the service is inappropriate for meeting them. The social-service worker has a concern with the whole

person; people are not split up into parts like work assignments.

It is the task of the workers to put the client in touch with, or to refer him to, other social agencies that have been set up to cope with either some or all of his problems. Sometimes the worker will play the major helping role, part of which will be assisting the client to use resources outside the agency.

For example, the worker may help the client primarily with a health problem of her oldest child. However, it may become apparent that the family has a severe financial problem, and in fact, has an income below the amount at which people are considered eligible for public assistance. The worker may continue to help the client plan for the cure of the child and to cope with the family problems created by a sick child requiring much attention from the mother. He can also inform the parents of their eligibility for financial assistance, encourage them to apply if that is necessary, tell them how and where to apply, phone the worker in the welfare agency to make an appointment, and help them to prove their eligibility if they request or need that assistance.

Preparing an Ineligible Client for Referral. From the beginning of an intake interview, the worker may recognize factors that might keep the client from being eligible, such as living outside the geographical area served by the agency, or failing to meet income, age, or other requirements for service. As soon as it becomes apparent that the client is ineligible, or that the agency does not provide service for the main problem, the worker should begin to prepare the client to obtain the service of another agency. It is often important to keep him from continuing to tell the story that he will have to retell at the appropriate agency.

No matter what the worker does, there will probably be some disappointment, even anger, when the client learns that the agency cannot help him. Tact, on the part of the aide, is required in such cases. Often it takes a lot of effort for a client to come to an agency and to bring himself to the point where he can ask for help. To learn that the agency cannot help him may be very difficult. *The social-service aide should be sensitive to the client's plight. It is the worker's job to be patient with the client who responds angrily to being turned down.*

Appealing the Ineligibility Decision. If the client feels that he is being unjustly treated by the aide or his agency, there may be some way to help the client appeal the decision. The worker should be aware of the procedures for appealing, and should be ready to interpret these to the client, to offer him help in making an appeal, or to suggest that he seek the

help of groups (such as a welfare recipients' league) that specialize in protecting the rights of applicants. If the client wants to talk to someone higher up, the worker should be prepared to arrange this interview or to direct him to the higher-level staff member. This request is not a personal insult to the worker, and it should not be interpreted as such by the aide.

Client protests of this sort should be regarded as *healthy*, and should be courteously handled. A client who feels that he has been given a fair opportunity is better able to use other resources that are offered.

Knowledge of Community Agencies. Considerable knowledge of community agencies is necessary if referral is to be skillful and helpful. To begin with, particularly in a large city, it is difficult not only for the clients, but for workers as well, to have a full knowledge of available social resources. This involves more than having a city directory of social agencies.

Most cities or counties do have a directory published by an association to which many agencies belong - a welfare council or council of social agencies. If there is such a directory, the aide should familiarize himself with it. In addition, some neighborhoods in large cities have guides to agencies serving neighborhood people. If there are such guides available and they are helpful in the neighborhood he serves, the aide should obtain a copy and become acquainted with it.

Developing a Resource File. Beyond these useful listings, the worker will probably need to develop his own resource file, one that is specially compiled for the aide's clientele. It is simply not enough to know that an agency exists and that it serves a certain client group. The aide must know whether services are actually or immediately available, or if there is a waiting list of eligible clients for services. The worker must know during what hours services are offered, whether workers speak the foreign language that some of his clients might require, etc.

The aide must understand each agency and the way it works. Otherwise, he will not be able to make proper referrals. The best way to achieve this understanding is to visit each agency, talk with the workers, find out what it is doing, and how clients can use the services of the agency. It is important that aides establish a good working relationship with the workers to whom they will be making referrals. If possible, it will help for aides to meet other workers in person, rather than just over the phone. Above all, the aide must try to imagine that he is the client using the agency so that he will be able to help clients prepare themselves for this contact.

Form of Resource File. Once the worker has information about an agency, including his reactions and impressions, he should *write it down*. He cannot keep all this information in his head. The aide should make a directory of services, perhaps a loose-leaf notebook, a telephone book, address book, a card file, or whatever else he finds convenient to use. The information about each agency should include such items as:

- Name, address, and telephone number of agency.
- Name, title, office number, and phone extension of person or persons to whom referrals are made.
- Hours the agency is open and when various services are provided. (For example, a welfare agency may have a shelter open at all times, but its office for making public assistance applications is only open during daytime hours, Monday through Friday.)
- Eligibility, including important facts about special groups served (age, income, residence, etc.).
- Types of problems handled or services offered.
- Public transportation routes to the agency.
- Foreign languages spoken by workers.
- General impressions.

In organizing a directory, the aide can use subject or problem headings. For example, file information about agencies dealing with housing problems together. Or the aide may find it easier to list all agencies alphabetically. In this case, the worker will have to remember the exact names of agencies.

Resource Data Communication. A resource file is no good unless it is up to date. It is very discouraging for a client to be sent to an agency for services which were available last month but have been discontinued. Every few months, if the worker is not constantly in contact with an agency, he should call the intake worker of the agencies to which he makes referrals and inquire about shifts in services, new services, hours, etc.

While an aide may want to keep a resource file that is easiest for him to handle, information about resources also should be shared throughout the unit and recorded on a central unit file, if possible. If an individual worker learns about a new service or a new group becomes eligible for an old service, he should spread the word systematically to other workers. This can be done either by an office memo, at a staff meeting, or in some other way generally used in the agency for sharing such information.

Referral - a Brokerage Service. Telling a client about a ser-

vice is not the same as making a referral; the task of referral is seldom that simple. Referral is a *brokerage service* in which the social-service worker sees that the client and the needed service get together.

It is often necessary to work with a client for some time befor the client (and sometimes the worker) sees the need for a certain service. An example might be psychological care for a child who is constantly causing trouble in school. It is not simply that the client lacks a knowledge of these services, but rather, that he needs to be helped to see that the child needs such care.

On the other hand, the problem may be a matter of eligibility and of making sure that the client and his problem fit the agency services. Sometimes there is no resource for the client. Or the problem may be to exert pressure as a worker, or to encourage a supervisor, the agency, or organized groups in the community, including groups of clients, to influence the agency to expand its services or make them available to new client groups.

It may be necessary not only to help the client see the need for a service, but also to keep reassuring him of its ability to help him or his need for it, even after he is in touch with the agency. The aide may have to confer with workers in other agencies, not only to let them know that the client will be coming to the agency, but to learn about the contact he makes and ways in which the local staff may be able to encourage the client's best use of the services.

In making referrals, the aide should learn what other agencies need to know about a client. Aides should be able to describe a client's problems clearly and concisely in a way that will be most helpful to workers in the other agency. The aide need not describe all the details of his contact, but only what the other workers need to know in order to avoid having the client and the workers rehash information the original aide could have supplied.

Normally, *an aide will not make a referral* (unless it affects the client's health and safety or that of others) *unless he has the client's permission. The aide must ask him if it is all right to tell the other worker about the problems that the aide and client have been discussing.* Often a referral serves as an introduction of the client to the other agency. On the other hand, it is preferable to have the client make as many of the arrangements as possible with the other agency, for it offers him the chance to exercise his independence. In that case, and ideally, an aide's job is to help him to anticipate what his contact with the other agency will be like.

HOME VISITING

In addition to the individual services aides perform within the agency, they will probably be visiting some clients in their homes.

Reasons for a Home Visit. There are many possible reasons for home visits, depending, of course, on the agency in which the aide works. If the client is old and/or ill, intake may be conducted in the home. An agency dedicated to providing service will extend itself and consider the convenience of the client rather than that of the agency. It may, in terms of time, be more efficient to conduct interviews in the office. However, both because of what can be learned from a home visit, and the feeling of the client about a worker coming to him, the advantage of such a visit cannot be measured in terms of time.

Another reason for a home visit may be to accommodate a client who would otherwise have to bring a number of small children with her to the office. Or, if the problem is one related to lack of household equipment or rundown housing, one look is worth a thousand words of description. The home visit is important in understanding how a family functions, how well the parents are able to run the home, and the interaction among various family members. The worker may also be able to meet other family members, such as teen-agers, who may find it difficult to talk openly in an office.

Behavior in a Client's Home. While office interviews should be relaxed and informal, home visiting is likely to be even less businesslike. Even though an aide is there on agency business to find out some facts, or to get something accomplished, he should be prepared to chat, or to accept a cup of coffee, allowing the client to be the host or hostess. This helps the client feel that she is giving, rather than always *taking* the services the aide provides.

Take time to chat with others in the home or with friends who drop in. Remember, it's the client's home, and neighbors may drop in - in which case, workers have to interrupt or discontinue their discussion.

The social-service aide should either beinvited by the client, or ask and receive his permission to come. *Aides have no automatic right of entry into a client's home.* They should always make sure that they never undertake an assignment in which a person's privacy is not respected. Workers hardly contribute to a person's sense of worth or his feelings of independence if he feels that even his home is not his own.

When an aide visits in a home, he may observe behavior and conditions that may upset him. Sometimes, if a house is in utter disarray, the worker may not approve of the client's homemaking. The apartment may be extremely dirty, and the hallways may reek with foul odors.

It may be that part of the work with a client will involve helping in changing some of the observed behavior. One good example would be severe physical punishment of children, or even child neglect.

But workers will never be able to help the client to change if they display a critical attitude in his home. This does not mean that aides cannot be frank with clients, when they are discussing problems, but *aides must learn to control themselves*. Aides may be terribly upset by severe overcrowding and vermin - and should be. The client may ask the social worker to support his reactions to the dilapidated condition of the building, but this is very different from delivering a sermon on cleanliness.

While home visits are more relaxed, their purpose should not be forgotten. Once again, an aide is a worker with an assignment and no longer simply a friend. If the aide fails to address himself to the problems for which the client has sought help from the agency, he will be visiting neither as a friend nor as an aide.

CONCRETE SERVICES TO CLIENTS

Providing *concrete services* is sometimes looked upon as requiring less skill than *talking services*. However, provision of concrete services requires considerable judgment and skill and cannot be performed in a routine manner. Often the offering of concrete services is accompanied by considerable talking and counseling.

Deciding when to provide a service is an important judgment. Generally, the aide should consider himself an *enabler*. He helps clients to do things for themselves, to make use of some opportunity or resource, such as a clinic or a camp for the children. He backs up clients, helping them to do those things that need doing. This may take the form of verbal encouragement or advice and suggestions. Or it may involve physically doing something with the client.

Escort Service. One thing a worker can *do* is to accompany the client, or arrange for someone else to go with him, in order to increase the likelihood of his making the best use of services or using them at all. Escort service *enables* the client to keep his appointment at a clinic, to visit a sick

child in a mental hospital some distance away, etc.

Why would a client need an escort? He might be old or have difficulty traveling because of physical or mental disability. In this case, the escort can actually help to assure his safety. The client may be a newcomer to the city, unfamiliar with the language and with systems of transportation. In such a case, escorting him one time can serve to teach him how to get around better or to get there by himself the next time.

The escort can also act as an interpreter at the clinic or the family service agency. The client may not be able to express himself because of lack of education or insecurity in a large, complex office. Or the client may be facing a very difficult situation, such as visiting a dying relative. In these cases, the escort may go along to provide emotional support.

In many of these cases, the escort may only be necessary for a first, difficult trip, but in others, escorting the patient will have to be continued for several trips.

In providing escort services, the aide should not hesitate to act for the client if he actually needs it, or seems unable to talk or to assert himself. But - *never act for the client unless he cannot do it himself.* It is best for him to do the talking, and ask for what he wants. The companionship and presence of the aide may be just enough support for him to carry this off successfully.

The aide can use the opportunity to learn more about how his client functions in the community, in contrast to how he presents himself in the aide's office. Also, serving as an escort will enable the aide to familiarize himself with a different social agency and to learn, to some extent, what it is like to be a client rather than a worker from another agency.

Shopping. Another *concrete service* may be to shop with the client to help him get the most for his money. If this service is required of aides, inservice training should deal with consumer habits.

In addition to general consumer know-how, the worker needs to be familiar with the shopping resources in the community. This can be done by establishing and maintaining contact with local social-action groups that are concerned with consumer problems. If shopping is one of an aide's assignments, his name should be on the mailing lists of all local consumer-service agencies.

Child Care. What to do with children while their parents handle family matters away from the home? This is an ever-

present problem in the slums of our cities. If the social-service aide has a continuing relationship with a family, the aide should be prepared, at some point, to help the mother work out long-range care for the children. This may take such form as nursery school, day care, or Head Start. But, in a pinch, it may be necessary for the worker to stay with the children while the mother is on an important errand.

Child care is never wasted staff time. First, it really convinces the client of the agency's desire to be of help. Second, it provides an opportunity to observe home life, which should help the aide in working with the client.

It is probably unnecessary to remind workers that they should merely be a stand by for the mother, rather than to try to bring about any changes in family routines, no matter how urgently they may be needed. Aides should, therefore, get careful instructions from the mother concerning needs of all the children they will be caring for, including any special problems, such as care for a sick child. Do not create confusion and undermine the mother's role by failing to carry out her instructions. *Once again, respect the client's privacy and authority in his or her own home.*

LIMITATIONS OF INDIVIDUAL SERVICES

It is sometimes preferable to work with persons on a one-to-one basis. For example, the client who comes to an agency with a problem that gives him embarrassment may feel more comfortable talking in private with only one person. Indeed, it is hard for some people to talk about their problems with any outsiders. A person who feels particularly unloved or especially unhappy at the time will probably profit from a contact in which he is the sole object of a worker's concern - in contrast to his being one of a group of persons served by the worker.

The Group as the Preferred Unit of Contact. There are some very good reasons, based on efficiency or on offering better service, for using group, rather than individual, services. For example, certain kinds of activities, such as explaining rules and regulations in public housing, or how to get information required of everyone who applies for public assistance, can be easily handled in a group of clients. Working with a group will save the worker's time, and sometimes the questions or problems that one client raises will help another to learn what is expected, required, or offered.

Sometimes a person's problems stem from loneliness or are the result of his inability to get along with others in a group - the family group, his neighbors, a community group. In those

cases, the best service, or at least an important service, would be to offer him a chance to practice or to iron out his way of getting along with others; or to give him a little extra push in getting together with others, if he is shy and slow to make contacts outside the home. Such group experiences with recreation, community education, etc., are helpful for newcomers to the city.

Sometimes the group is helpful in showing persons that others have problems like them. People may feel less bad-off or less evil, perhaps, if others are in the same circumstances. The group is also a *reality* situation, for it may help the worker to see how the client behaves in a group, which is more normal or more like everyday life than the worker-client interview. The group also provides a chance for the client to practice changes in behavior in a *real* situation.

Social Action. Sometimes, the agency works with a number of individuals who have the same problems. These can perhaps be handled on an individual basis, but it is less efficient and less permanent to do so. For example, if many of the clients of a neighborhood service center have similar housing problems such as no heat, rat infestation, or peeling plaster, workers can help them to handle complaints individually - and sometimes an emergency such as no heat in winter needs immediate individual attention.

Problems like these continue to happen to many individuals unless some pressure (such as a group of tenants complaining to city-rent agencies or conducting a rent strike) forces a landlord to make the repairs, or to provide the missing services to a whole building or group of buildings. If many clients find shopping prices in the neighborhood high, then individual budgeting won't help much. If a group of residents complains to the management and shows where prices are higher than in other stores in the city, or (as a last resort) pickets in front of the store or boycotts it, the prices may go down. These and other problems can only be solved through organized activities.

As has been shown in this unit, there are many individual assistance skills an entry-level social and economic service aide must acquire to become an effective help to the clients he serves.

STUDENT LEARNING ACTIVITIES

- View the film *Low View from a Dark Shadow* and discuss what attitudes you feel social-service workers should have about their jobs.
- Develop a list of the important factors to keep in mind when communicating with a client on his first contact

with a social-service agency.

- Role-play as a social-service aide interviewing a client who is asking for financial help. Each student should have an opportunity to be both the aide and client.

- Debate the statement: *Social-service aides should solve the client's problem for him, and not let the client choose his own solution.*

- Write a short essay on this question: *When asking clients questions, what affect do you feel jargon and prying has upon the client-aide relationship?*

- Role-play the following individual assistance skills in a simulated social-service agency:

  - intake
  - referral
  - information giving
  - screening
  - home visiting

- In small groups, discuss how you would tactfully tell a client that he or she is not eligible for the services of your particular agency.

- Visit a local social and economic service agency and interview a worker concerning the individual assistance skills he uses with clients.

TEACHER MANAGEMENT ACTIVITIES

- Show the film *Low View from a Dark Shadow*, and discuss with the class how the attitudes that social-service aides have towards clients affects the whole aide-client relationship.

- Have the class develop a list of the important factors to consider when communicating with a client on his first call to a social-service agency.

- Set up role-playing assignments with social-service aides interviewing clients in need of financial and/or emotional help. Each student should be allowed to role-play as a client and as an aide.

- Arrange to have the class debate such statements as: *Social-service aides should solve the client's problem for him, and not let the client choose his own solution.*

- Assign an essay on the following question: *When asking clients questions, what effect do you feel jargon and prying have upon the client-aide relationship?*

- Supervise role-playing exercises in the use of the following individual assistance skills in a simulated social-service agency:

intake	referral	information giving
screening		home visiting

- Divide the class into small groups, and have the students discuss how they would tell a client he or she is not eligible for the services of their agency.

- Arrange to have the students visit a local social-service agency and interview a worker concerning the individual assistance skills he uses with clients.

RESOURCES

Low View from a Dark Shadow (Movie, 16mm, rental), Indiana University A-V Center, 1970.

How to Conduct the Appraisal Interview (Programmed Instruction Book), Metromedia-Analearn, 1970.

Interview, Social Worker (Audio Tape, purchase), Imperial International Learning, 1969.

Handling Complaints and Grievances (phonodisc, purchase), American Management Association, 1966.

Understanding Human Behavior: A Guide for Health Workers, M. E. Milliken, Delmar Publishers, 1969.

Successful Living, E. M. Peterson, Allyn and Bacon, 1968.

Permanent Poverty; An American Syndrome, B. B. Seligman, Quadrangle Books, 1968.

Unit 6

INFLUENCES ON PEOPLE

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Unit 6

INFLUENCES ON PEOPLE

INSTRUCTIONAL OBJECTIVES

1. Ability to understand how social and physical needs serve to direct behavior.
2. Ability to display a knowledge of the balancing processes that serve to regulate people's needs.
3. Ability to distinguish between the physical and social needs of individuals.
4. Ability to compare the effects of physical drives with social drives on influencing people.
5. Ability to restate the needs, interests, values, and emotions that influence the way people behave.
6. Ability to apply in a job situation, knowledge of the various factors which influence people.

CONTENT

INTRODUCTION

No matter how carefully the growth and development of a person's abilities and other personality characteristics are traced, we still need to understand the motivation behind people's acts. Social-service workers, like everyone else, need to know what forces cause them to do what they do. They should also be aware of what other forces may stop them from using their abilities to the fullest. In this unit, we will explore the pattern of motives that influence the way people behave.

Motivation from Within. Social-service workers should realize that people do more than just respond to stimulation in their immediate environment. Our behavior is more than a mechanical

reaction to such external forces. We all have drives and needs which in their own right propel us to action. These motivating factors all affect each of us in a unique way. Consequently, we perceive the world through our own individual pattern of values. Even the outside stimuli that act upon us are in turn affected by the patterns of drives and needs which are active within us at any moment.

Balancing Inner Needs and External Demands. As human beings, we are constantly trying to adjust to life. Some of us are more successful than others. This adjustment is a constant process of attempting to balance our inner needs with the demands placed on us by our physical and social environment. No human can fully escape some degree of frustration and stress in trying to maintain this balance. Our mental health is determined not so much by the amount of frustration and conflict in our lives, but by whether or not we deal with these factors in a realistic and constructive way. Students of the field of social-service need to ask these questions:

- Why do people search for food, water, or a place to rest when they are hungry, thirsty, or tired?
- Why do some men obey the law and others defy it?
- Why do some students energetically apply themselves to their school work while other students prefer to loaf?
- Why do some people have to work at two or three jobs, while others are content to be idle?

The answer to each of these *whys* involves a problem of motivation.

Need for Understanding Behavior. Knowing why people behave is useful in all areas of public service. The experienced teacher makes learning easier and more effective by relating it to the students' needs. The manager in any social-service group is frequently called upon to apply his knowledge of human motives. He finds this knowledge necessary in his attempts to meet employee's basic personal needs, preserve agency peace, and maintain the delivery of services to the public at a high peak of efficiency. People in the social services especially need to understand why people behave as they do. To some extent, we all appraise almost unconsciously the needs, interests, values, and motives that influence the way people behave. But when we say that an individual is motivated in certain ways, what do we really mean? What is actually happening, biologically (physically) and psychologically, within the individual? These questions are explored in the following sections.

Behavior Influenced by Goals. With the exception of simple reflex behavior, definite internal conditions called motives serve to direct people toward certain goals. Motives can be inborn or learned, or a combination of the two. If a person thinks back over his own behavior during the day, he will see that all of it is directed toward some goal, if only the enjoyment of a rest from pursuing other goals. When we wake up, it may take a strong motive for us to leave our comfortable beds. Perhaps hunger pangs will win out, aided by the smell of coffee or bacon.

A more complex aim for which one might be striving is getting to school on time. This in turn involves such goals as learning about this unit, graduating from high school, and the eventual long-range goal of entering a career. In this example, it might be an entry-level position in social-service. A long-range goal then, of studying this unit is to secure employment in social-service. Thus, as can be seen, human motivation is highly complex.

The first part of this unit deals with physical motives; that is, those bodily needs such as hunger and thirst. The second half of this unit will consider the needs learned through experiences in living; the so-called *psychological* and *social* motives of behavior.

PHYSIOLOGICAL MOTIVES FOR BEHAVIOR

Biological Drives - Survival Mechanisms. Physical drives originate in the bodily needs of the human being, and consequently are often referred to as *biological drives*. These drives motivate the behavior of every human being in directions that are meant to lead to satisfaction of those needs. For example, the hunger drive motivates people to seek food which is necessary for survival. Failure to satisfy biological drives will result in impaired health, or even death.

It is generally agreed that the biological drives are inborn. They are present in every living organism from birth. All men have the same physical needs for survival. Despite their importance, the biological drives are by no means thoroughly understood.

The following distinctions should be made:

- *motive* - any condition of the human that affects his readiness to start a sequence of behavior;
- *drive* - an aroused condition of the human;
- *goal* - an end-state or reward toward which the motivated sequence is directed, and by which the sequence of actions is completed.

Biological Drives - Balancing Mechanisms. Though they vary in intensity, all of the biological drives are balancing or regulatory mechanisms which help maintain the physical balance of the individual. This tendency of the human body to maintain an internal biological stability is a result of the activity of the nervous system and other biological factors, as well as certain chemical glands. Whenever an internal state of the body is disturbed, tensions are produced which motivate the goal-seeking activity of the individual. That behavior ceases only when the end-state (reward) is attained and biological stability is restored. Failure of the human body to maintain this internal balance will eventually result in sickness or death.

Of course such biological needs can never be satisfied permanently. Man's nervous system is capable of perceiving very small physical changes. These internal changes serve as clues to a change in his biological balance. He can, following such clues, anticipate bodily needs (such as changed environment, medical care, etc.) to prevent further discomfort. This tendency is present in every human being. It involves an active effort to establish a physical environment that is as constant as possible.

Now that the physical drives have been shown to be a balancing process, we can examine the specific biological drives, and their influence on man.

PHYSICAL NEEDS OF MAN

Hunger Drive. The need for food has probably received more scientific attention than any other. Yet, the answer to the question of what makes people feel hungry is still something of a mystery. The need for food rests upon the fact that food substances are used up in the blood. When the food level reaches a certain point, man eats just enough to satisfy his physical need for food. This drive is self balancing, since people normally do not eat either too little or too much at one time. While it was once thought that stomach contractions produced the need for food, evidence has shown that this is not the case. Human beings have reported being hungry just after eating a big meal. Most surprisingly, people who have had their stomachs surgically removed have reported normal hunger pains! There is no easy answer to explain hunger feelings.

Some findings suggest that the origin is chemical in nature. It may be that a number of complex mechanisms result in the hunger drive. One fact that cannot be denied, is that hunger can direct behavior. This behavior usually results in man getting food. His internal physical state is balanced by eating when hungry.

Thirst Drive. Man can go for weeks without food, but he can survive for only a few days without water. Dryness of the mouth and throat contributes to thirst. But the craving for thirst can be satisfied only in part by relieving the source of dryness in the mouth. Just as stomach contractions provide only a part of the hunger drive, so dryness in the throat provides only one component of the thirst drive.

The thirst drive is a regulatory function which strives to maintain the water content in the body at a constant level. There are many factors which contribute to this complex bodily drive, including: nervous system responses; dryness of the mouth, throat, tongue; and the concentration of salt and other chemical substances in the body fluids.

Much more study needs to be done before a complete understanding of all the factors involved in the thirst drive are known.

Need for Air. The need for air is the most intense of all our physical drives. This need for air must be continually satisfied. Serious damage can occur to the human nervous system if the brain is without oxygen for as brief a period as one minute. A lack of air can result in what is called *oxygen starvation*. When oxygen starvation occurs in a high altitude, a unique sort of drunkenness or confusion results from the lack of carbon dioxide. The person so affected may lose control and shout, fight, or burst into tears. Memory is impaired and the senses function poorly. The person may be weak in the legs, yet feel perfectly confident in his abilities - often failing to recognize the seriousness of his condition, although behavior is drastically influenced.

Fatigue and the Need for Sleep. The need for sleep seems to depend upon many factors such as chemical balance in the muscles of the body, injury to certain parts of the brain; learned responses. Even cultural factors influence this basic need. In Mexico, for example, the national culture influences most Mexicans to have a daily *siesta*.

Studies have shown that humans begin to function less efficiently the longer they go without sleep. Some simple tasks can be accomplished by people who have gone for as long as 100 hours without sleep. However, for any complex task the individual's performance drops off significantly after 30 hours without sleep. With few exceptions, most individuals require from six to nine hours of sleep daily. While this relatively constant amount of sleep appears to be based on bodily needs, more work needs to be done in this area.

Sexual Drive. Although sexual drives are physical in origin,

they have profound effects on man's social environment. The restrictions or taboos of society upon the various forms of sexual expression are firmly rooted in our laws and social conventions. Although the sex drive is necessary to the survival of the human race, it is not absolutely essential to any single individual. But behavioral scientists tend to agree that sexual satisfaction is conducive to achieving the best physical and psychological health.

The sexual drive in the male appears to be governed primarily by substances produced in his body called hormones. These hormones are responsible for maintaining a relatively constant drive state. Unlike many animals which mate only during periodic cycles, man is capable of mating throughout his grown life. Most men reach the peak of the sexual urge in their late teens and this peak begins to decline in the early twenties. This falling off of sexual urge is again related to a decline in the quantity of hormones secreted. However, social factors do influence the sexual level of each man. Contributing factors do include family life, mate, and career interests.

The sexual drive in the female is much more complex than that of the male, and the glandular and social basis of the sexual drive in the female is also much more complex. The female hormonal secretion is influenced by monthly changes in her bodily functions. The female can only become pregnant during a few days of each month. In the female this period usually occurs about halfway between her menstrual periods.

Social factors are even more important in regulating the sex drive of women than of men. Despite the current women's liberation movement which seeks equal opportunity for all, regardless of sex, the fact remains that many females in our culture are brought up with a prejudice against sex. Many girls are taught that sex is *bad*, or that the sexual drive should be ignored. These concepts, the result of centuries of society's established rules of behavior, influence how a young woman feels about sex even after she is married. Many studies have shown that unpleasant sexual experiences, as well as fear of sex, can make a woman unable to adjust to her mate, even though she may be perfectly normal biologically.

Pain as a Drive. Pain can also serve to motivate a person, as anyone who has touched a hot pan can testify. Pain has important physical significance since most harmful situations produce pain as well as injury. Therefore, in seeking to avoid pain, a person also tends to avoid being hurt. The need to avoid pain, and to help protect others from it, has become one of the most important motivating forces in the history of man. It might be the reason why many people chose to work in public safety or social-service occupations.

Pain is often closely related to the general emotional setting in which it occurs. People who are having problems in trying to adjust to life often respond to pain differently.

Temperature as an Influence on Behavior. The reactions of our body to temperature differences are separate responses. People do not usually want to be too hot or too cold. Again, our body constantly strives to keep itself regulated. When a person feels cold, bodily activity is stimulated. This increase in activity warms the person up. When he feels hot, perspiration begins to cool the body. Internal physical changes occur. The arteries at the surface of the body increase in size, allowing more blood to be exposed to the outer surface of the body. The opposite occurs when one is cold. The blood flows into deeper tissues where it will not be exposed to the cold. All of these changes occur automatically.

PSYCHOLOGICAL AND SOCIAL MOTIVES FOR BEHAVIOR

Psychological and Social Drives. It should be readily apparent that the biological drives have a direct and fundamental effect on human motivation. However, it must not be forgotten that man is most importantly a social animal. Other individuals have to be considered in almost everything a man does. In fact, most of life's joys and sorrows are shared with, or caused by relationships with other people.

The origins of psychological or social motives are as complex and difficult to understand to a psychologist as to the layman. Two main possibilities exist for the origin of human social motives as we find them:

- *Social motives are innate or inherited.* Man everywhere seems to have certain psychological needs which he expresses to other people in his particular culture. Examples of such needs include the need for security and the need for approval. Although these needs are sometimes overwhelmed by other needs, their satisfaction is nonetheless essential to an individual's healthy development. Are these needs present at birth? The viewpoint that social motives are inherited is not widely accepted today. A more accepted belief is the following:

- *Social motives are acquired in the course of social behavior.* People often do things to please other people. Humans learn to attach reward values to formerly neutral objects. Previously neutral objects become symbols of rewards. Anyone who has ever studied for *grades* or worked for *money* will attest to that. Symbolic rewards can take the shape of a calm or soothing voice that once comforted an individual. Such behavior may continue to assume an

award value in later life. This behavior was acquired through his early experiences with other people.

By a similar process a human learns to avoid certain people, words, or objects which have come to be associated with painful experiences. Even when one is unaware of the reasons why he is being rewarded or punished, the very process influences his behavior. Behavior which is rewarded is more likely to occur again in the future than unrewarded behavior. All socialized human beings seek out and are motivated by symbolic rewards of some kind.

Social Factors in Motivation. The need for social approval is present to some extent in all humans. A social-service worker needs to be aware of this. Individuals seek social approval not only from co-workers, but also from the people with whom they come into contact. Different cultures exhibit different social motives because people in different cultures learn different values in relation to their local society. One's tone of voice, or even his choice of words may be culturally influenced. For instance, when an American worker might say, *"Be good!"*, the French worker might say, *"Be wise!"*, the Scandinavian says, *"Be friendly"*, and the Apache Indian says, *"No, that is not the Apache way."* As can be seen, each culture has its own way of influencing an individual's behavior.

Values as Motives. Each of us is motivated by his own personal value system. It is important to remember that individuals have different sets of values. Human motives are often classified according to the importance they have in one's life. A person's value system may change as he acquires new experiences.

There are those who disagree with the values of the establishment. They tend to seek social approval within a segment of society that believes in the same values. Occasionally, such groups will help to break through the apathy of the people. Social and political change is often started by such groups. Group values can, therefore, have an important influence on society.

Interests as Motives. Every human has interests in someone or something. Interest is a pleasurable experience that accompanies some behavior. Usually, one becomes interested in the things one can do well and enjoy doing. However, an individual is seldom seriously interested in any activity in which he repeatedly fails. Those individuals planning on working in the educational field should be particularly aware of this. How interested can an individual be in staying in school if he has only experienced failure or ridicule? The development of individual interests - and the degree to which

these interests motivate human behavior, is directly related to our need for self-approval.

Curiosity is a closely related need. Man, like many animals, appears to be naturally curious. Man's motive to explore sometimes gets him in trouble. For example, teachers sometimes discourage curiosity. Curiosity, however, is a valuable motivating force when it is properly channeled, and can lead to new discoveries and the advancement of mankind.

Psychological and Social Motives in Balance. Previously, in this unit, the concept of the balancing mechanisms in the physical motives was explored. Man's psychological and social motives operate as balancing mechanism in much the same fashion.

Excessive psychological needs compel a person to satisfy these drives. The individual is motivated to create and maintain a stable social environment - one in which such needs as love, security, approval, prestige, and knowledge, are fostered and developed in such a way as to maintain this *constant state*. The adult can satisfy his biological needs fairly easily in today's society; it would seem that now the primary driving force behind human behavior appears to be the drive to satisfy his psychological needs.

It is not that easy today to satisfy all the psychological or social goals. There is more to life than just reducing tensions. As a part of growing and developing, new tensions are constantly being created, making the balancing mechanisms a very complex model of behavior. How we deal with these tensions will influence our individual behavior. Rather than constantly trying to escape tensions, the mature adult tries to cope with them, or at least tries to reduce them by channeling them toward new and higher goals. Life without experiencing *any* needs would be pretty dull.

STUDENT LEARNING ACTIVITIES

- Through individual study (for example, reading programmed texts such as the *Biological Basis of Behavior: a Program)*, explore articles on motivation and needs.
- Discuss in small groups the meaning of such terms as: physical and social needs, goals, and motives.
- View films such as, *Unconcious Motivation*, and *Crisis in the Classroom*. Show how motives influenced the behavior patterns of the individuals portrayed.
- Depict a typical situation by role-playing, as for example, a client talking to a social-service aide and applying for financial assistance. Illustrate how cultural differences

can influence psychological or socially learned motives.

- Prepare a paper on the reasons why a person is a better social service employee if he understands motivational factors.

- Arrange for a meeting with a psychologist or guidance counselor and ask him questions about the differences between physical and psychological motives.

- Write a short summary of physical motives, explaining the human balancing mechanisms.

- Write a short summary of the psychological, or social motives discussed herein, explaining the human balancing mechanisms.

- Discuss in small groups, those motives you consider inherited, and those you consider learned.

- Have class discussions, led by social-service workers, about the reasons why it is important to understand motivational factors on the job.

TEACHER MANAGEMENT ACTIVITIES

- Arrange for small group discussions of key points in this unit, for example the physical and social needs, goals, and motives.

- Divide the class into small groups and conduct role-playing situations, such as: A client is talking to a social-service aide about his eligibility for financial assistance. Show how cultural differences influence psychological or social motives.

- Invite experts in the fields of human behavior to talk to your class. Have them discuss topics such as the biological and psychological motives for behavior.

- Have the students write short essays on the physical and/or psychological motives and how they direct behavior.

- Encourage individual study in the area of motivation and needs.

- Show films on motivation, such as *Unconscious Motivation* and *Crisis in the Classroom*. Have students talk about movies they have seen illustrating how needs influence behavior.

- Assign a unit paper to discuss reasons why understanding motivational factors can make one a better social service employee.

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Unit 7

CROSS-CULTURAL SKILLS

Here are the contents of Unit 7 of the Social-Services group. We suggest a careful reading of it before you read the text.

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Unit 7

CROSS-CULTURAL SKILLS

INSTRUCTIONAL OBJECTIVES

1. Ability to differentiate between race and culture.
2. Ability to evaluate the effects culture has upon one's self, one's community, and one's country.
3. Ability to understand how cultural influences affect individual behavior.
4. Ability to communicate effectively with individuals from different cultures.
5. Ability to use cross-cultural training exercises to become more sensitive to cultural differences between and within groups.
6. Ability to acquire positive feelings for the worth and dignity of all individuals.

CONTENT

INTRODUCTION

An awareness of cultural differences and group behavior is necessary for two primary reasons:

- First of all, many individuals from all cultures found in the United States are employed in the area of public services, particularly at the county, state, and federal levels of public service. So the chances of coming into contact with people from different cultural backgrounds other than your own is great.

  As an employer, the social-service institutions have led the fight to insure equal opportunity for all, regardless of racial or ethnic background or sex. Consequently, the

backbone of the social-service field is a richly varied and diversified one.

- Secondly, an entering employee should have knowledge of, and sensitivity for, different cultural backgrounds, since many fields in social-service bring entry-level employees into frequent and direct contact with cultures different than their own. Public servants need to acquire appropriate factual information about people of different cultures. They must realize the dignity, worth, and basic rights of all people.

Due to many complex reasons, such as poverty and general socio-economic conditions, minority cultures are focal points for social-service contact. Social welfare, neighborhood worker, probation, and correction service aides are a few examples of entry-level positions that often come into frequent contact with cultural minorities.

The purpose, therefore, of this section on cultural differences will be to translate these differences into a climate of healthy awareness to better the human condition for all.

RACE AND CULTURE

Before any discussion of cross-cultural skills can be made, the distinction between *race* and *culture* must be made.

Race. Mankind has been classified as having three primary divisions or races: Caucasian (white), Negroid (black), and Mongoloid (yellow or red). Skin color is a particular characteristic of race, as indicated by the colors in parentheses. Race is a biological concept. However, social attitudes affect the feelings individuals have about people of different races.

Human beings are all basically alike. Within this species, the term *race* applies to relatively large groups of persons who possess common hereditary traits. These racial subdivisions all come from the same species - *homo sapiens*.

Due to migrations and other mixing factors, there are no pure human races. In fact, there is probably more variability between different people within the same race than there is between races. It would be biologically correct to say that to some extent every man is a mixture or *hybrid*.

Racial purity has been a basis for claims of racial superiority. Such claims display an ignorance of the historical development of man. Race is simply a term used to describe large groups of men with similar physical characteristics.

Culture refers to the man-made environment. It is his skills, tools, folkways, and customs. Culture can refer to a group of people, a nation, or a community.

The things or objects particular to a certain group are its *material culture*.

Ideas, beliefs, and attitudes incorporate *nonmaterial culture*. Value systems may be a nonmaterial element. Even the behavior patterns of certain people can be considered as cultural nonmaterial differences.

Cultural development is not dependent upon race. It is the total way of life of any society. Culture is the sum of all common experiences shared by individuals within a group.

Cultural Change. Cultures are not static, they grow and change. As they change, they affect man and society. Cultures spread and grow for a number of reasons. For example:

- Concepts such as time and language spread because of their *practical appeal*.
- The theory of evolution has grown because of its *intellectual appeal*.
- Movies, art, sculpture, and music spread because of their *artistic and sensory appeal*.

The rapid rate of *travel* today helps to foster cultural change. As more people travel to new places, they take their old ideas with them and pick up new ones from the places they visit. This process results in a *cross-cultural exchange*.

- *Geographical* factors may help or hinder cultural change. Mountain ranges and deserts may hinder cross-cultural fertilization. Rivers, roads, and airways, however, often foster cross-cultural experiences.
- The *political climate* of a country will affect cultural change. President Nixon's trip to China and Russia in 1972 was a good example of sharing cultural experiences.
- *Language* can help or hinder cultural spread.
- Even *war* can be a source of cultural change. Thousands of Americans were exposed to different cultures in World Wars I and II, Korea, and Vietnam.

All of these factors contribute to the changing nature of all cultures. Some change more slowly than others. Members of one culture might try to cling to the *old way of doing things*.

They are comfortable and secure with a particular cultural style. One must be aware, however, that in a changing world there is no room for an unchanging culture.

CROSS-CULTURAL AWARENESS

Cultural Diversity. There are many cultures within America. Cultural diversity is one cause for prejudice. One's way of life is influenced by one's cultural foundation. Culture shapes an individual's ideas about life after death. It causes some men to wear a tie, some a bone on a string. Some people walk propped up on heels three inches high, others go barefoot. People stick metal rings through their earlobe, or nose. It is culture that determines these particular behavior patterns.

Cultural Competition. Cross-cultural experiences can lead to cooperation, competition, or conflict. If each group is cooperating, society usually has fewer problems. Competition can be beneficial, if the result is to bring about better service or improve efficiency. However, competition can be harmful when people from a particular culture are consistently the losers. When any individual group is unable to compete for jobs, houses, or a decent standard of living, the typical reaction is predictable. They reject competition and substitute force and violence to achieve goals.

Feelings of Cultural Superiority. Some people tend to believe that their group and culture is superior to all others. They feel that they have the best culture. If a stranger has different ways of behaving, some people will assume that the stranger is peculiar, threatening, or undesirable. People tend to view their own way of behaving as natural or normal. The result is that other people's ways are labeled unnatural or abnormal.

Another factor in forming attitudes of cultural superiority is a lack of objectivity. In many cases, individuals tend to judge another culture by their own standards, rather than the standards of the culture being judged. Their value judgments are therefore unnecessarily biased. This is not the correct way to evaluate another culture. The culture must be evaluated on its own terms, by answering the question, "Is it meeting the needs of its people?" In this manner one can come to appreciate the worth and dignity of every human being.

There are a number of reasons for the existence of culturally biased attitudes. Isolation can be a factor. People may grow up in a small community and not be exposed to other cultures. The school may only reflect the local culture of the community. The child may only be taught the attitude of one culture

through the educational system. Media may strengthen his cultural attitudes. Television, for example, might show Indians, or foreigners in ways which make them look ignorant, ridiculous in behavior, or stereotyped in dress, etc. One has only to think of the Lone Ranger's sidekick, Tonto; Charlie Chan; or Amos and Andy to understand how the media can influence cultural bias.

Many Cultures or One Culture? Contemporary opinion holds that the American melting pot did not melt. Rather, Americans - immigrants all - have tended to identify with their national citizenship by retaining their subnational affiliations as hyphenated Americans; i.e., Irish-American, Polish-American, Mexican-American, Chinese-American, etc. By largely rejecting integration into a single American group, and retaining segregation into distinctive groups, Americans have apparently decided upon separate cultures, rather than blending as a unit into a common mold and one culture.

Cultural pluralism in America essentially involves the retention of separate ethnic, geographic, and racial identities. These cultural differences are sometimes convenient categories for prejudicial labels.

The United States must be committed to the mixture of separate cultures as a significant value in our traditional way of life. A philosophical commitment to our stated constitutional and legislated ideals is not sufficient. Such a commitment in theory must necessarily be accompanied by an even greater commitment in practice lest our hallowed creed of *"Liberty and justice for all"* should become only a hollow sham. There is, as yet, no real unity within the diversity which our many cultural and ethnic groups represent. Instead, minorities still excluded from the mainstream of American society are striving to establish an identification and a feeling of pride in their own heritage. Simultaneously they are becoming increasingly more insistent on full-scale participation on equal terms in the ordinary affairs of American life. Prejudice and discrimination against cultural minorities continue to work against human fulfillment, but must be superseded by principled thought and equality.

The public service worker can play a significant role in regards to cross-cultural awareness. His relationships with people from different cultures than his own must be free of cultural bias or prejudice. There are many ways to learn about different problems that some cultures have. The following section on cross-cultural training exercises will deal with suggested activities designed to foster an awareness of these cultural differences.

CROSS-CULTURAL TRAINING

Once committed to the idea of cultural plurality, the question of cross-cultural training arises; training that is needed to examine the effects of mixing the separate cultures in American society.

The teacher is the key person in implementing such a program of cultural awareness. The most important ingredients for effective cross-cultural education are the attitudes and relationships of the students and teachers. The teacher and students must:

- Agree with the objectives and goals of cross-cultural training,
- Make personal commitments for the need and value of integrating cross-cultural education concepts in the classroom,
- Gain positive relationships with each other, in creating an environment for free discussion of feelings and emotions.

Recognizing that not all teachers are trained in cross-cultural programs, it is desirable to highlight various techniques designed to foster cross-cultural sensitivity.

Training Methods. A great many exercises have been developed especially for use in cross-cultural training. It would not be possible to represent them all in this unit. However, a number of exercises that have proven to be effective for cross-cultural training can be presented, showing their relationship to content and role-playing models. These exercises, particularly when used with the role-models, are the best method found so far for transmitting factual and relevant information in a form that is comprehensively involving, and meaningful to the students.

These exercises are presented as examples of what might be done, with suggestions for developing similar exercises specifically designed for a social-service program. It would be a mistake to attempt to use many of the exercises given in their present form. It is the responsibility of the teacher to select those exercises that would be most suitable for his program. He should select the appropriate content for each exercise, and plan a program based on a logical, sequential, and developmental relationship among the various exercises.

Community Description. One cross-cultural exercise involves a definition of the local environment. This would be a general description of the entire community portrayed in the hypothetical social-service worker's role model. The community should

be quite typical of the kind of community in which the student thinks he will be working. This description should have these purposes:

- The primary purpose of the community description is to provide the trainees with a general orientation to the area, the people, the culture, etc., all seen through the eyes of a hypothetical social-service worker.
- A secondary purpose is to allow the student an opportunity to see how the perceptions, values, judgments, expectations, etc., which he has formed of another culture, compare with those of the other students.
- A third purpose is to provide the setting for intensive interpersonal involvement over issues that are significant in terms of the participants' future roles as social-service employees.

Critical Incidents. Some of the exercises can be based on the occurrence of a particular situation. Critical incidents logically follow the community description. They consist of situations that occur between the social-service worker and one or more of the persons represented in the role model, or between other persons in the role model. These are, of course, more specific than the community description, which provides a general background and framework for understanding the critical incident.

- The primary purpose of this exercise is to introduce the student to typical kinds of situations in which he will find himself as a social-service worker;
- Discussing the proper actions will allow him to explore his possible reactions to these situations;
- The other purposes mentioned for the community description exercise would apply here as well;
- Another purpose is to allow the students to discover how little they know about the culture, and how much and what kinds of things they need to learn.

Case Studies. Taking actual examples of social-service case studies to use as models for role-playing can be an effective training technique. Case studies should be taken from the role model, and are really extended critical incidents. Try giving more information about the situation, so that the student will have a better understanding of the various factors that should be taken into consideration. With the case study, more cultural background information can be introduced. It should be very effective as an extension of a critical incident that was particularly puzzling to the trainees. Brief

critical incidents can, of course, cover many more situations of different types in a short period of time, whereas the case study covers a particular situation in greater depth. Both should be used, and should be seen by the students as complementary.

Situational Exercises. Situational exercises are very similar to the critical incidents, except that the student actually assumes the role of the social-service worker in the situation, and behaves or reacts as he thinks the worker should. Other students play the roles of the other cultures in the situation. The student is given minimum information and is told nothing about the way he should perform the role of social-service worker. He is thus totally responsible for his behavior in the situation. As a result, he is intensely involved in assessing the effectiveness or appropriateness of this behavior.

The primary purpose of this exercise is to go beyond what the student says he would do in the critical incidents, to what he actually does in the situational exercise.

Role-Playing. Role-playing differs slightly from situational exercises. Now the student is playing the cultural role of another person. Or he is attempting to play the role of the social-service worker in a certain prescribed way. Students should have an opportunity to play both roles. Role-playing is most effective if it is an extension of a critical incident, a case study, or a situational exercise. Students can become more sensitive to different cultural roles in such exercises.

Role-playing can be used to show how a situation should or might be handled. It can also be used to test a person's reaction to a particular situation or behavior.

Biographical Descriptions. Knowledge about a particular person and his culture can be acquired from biographical data. Biographical descriptions are logical extensions of any of the foregoing exercises. They can be very effective if they involve a person who is perceived as being particularly antagonistic, puzzling, irrational, difficult to deal with, etc. The biographical description then provides some insight into the character, personality, beliefs, values, aims, ambitions, etc., of the person. These factors have often developed from his particular cultural background. The effect of religion, family traditions, social status, etc., on the person are revealed and provide the student with some understanding and acceptance of the person's behavior and attitudes.

Nonverbal Communication Exercises. Different cultures express

their feelings in different ways. Body language often reflects a particular culture. The use of nonverbal communication exercises is particularly useful after the trainees have begun to feel some competence in their apparent understanding of the verbal behavior of the various cultures portrayed in the role model, or any of the exercises described above. It presents another dimension of awareness and understanding that is essential to effective relationships, and provides the students with the basis for studying cross-cultural communications. Students become aware of more than just the verbal differences of the particular culture.

Cross-Cultural Comparison Exercises. Various exercises and methods are available for the analysis and comparison of cultures. These are useful when the students have enough data and understanding to begin making meaningful comparisons. They are probably most useful in providing the students with a model that can be used for studying the predominent cultures in their own community. If used correctly, such a model will help the new social-service worker avoid stereotyped reactions or viewing the culture only from his own cultural point of view.

OBJECTIVES, ROLE, AND CHARACTERISTICS OF THE EFFECTIVE PUBLIC SERVICE WORKER

Cross-cultural training is desirable to increase the student's understanding of the objectives of social-service work. He should be aware of his particular future goal and his role as a social-service worker in relation to these objectives. He should know about the characteristics that are disired or required in the beginning worker.

This understanding is achieved more effectively, however, if the analysis and definition of objectives, and the role and characteristics of the effective social-service worker are assigned as tasks to be completed by the students. Such exercises help to pull together and make even more personally relevant the understanding gained from cross-cultural experiences. The student should be able to put himself in the center of the role model and describe his role and relationships, his objectives, how he must perform his role, and what he needs to learn to perform his role effectively.

SUMMARY

In summary, one can see that the culture does influence individual behavior. The culture of an individual affects and influences his clothing, tools, and the material objects he uses. Culture also influences man's total behavior; e.g., goals,

attitudes, desires, etc. The extent of the influence that culture has on individuals is great.

Behavior is largely a result of the environment and living conditions of a society, such as: urban, suburban, ghetto, rural, etc. This environment is again reflected in the cultural patterns of the Black-Americans, Mexican-Americans, Indian-Americans, Chinese-Americans, and other racial or ethnic groups. *Transforming these cultural differences into a climate of healthy awareness and appreciation for the dignity of man is a worthwhile goal to which everyone should aspire.*

STUDENT LEARNING ACTIVITIES

- List the differences between racial and cultural characteristics of man.

- Discuss questions such as:

  What is racial purity?
  Does cultural enrichment increase I.Q. scores?

- Conduct a survey of students' attitudes toward a particular culture. Find out about the income and occupations of the students' parents first, and then compare the results from the attitude survey with the social and economic standing of the students' parents. Ask such questions as: "Would you object to having a qualified_____(Mexican-American, Negro, Chinese-American, etc.) as a:

fellow student	doctor or lawyer
employer or employee	policeman or fireman
teacher	neighbor

  Tabulate the survey results, and correlate with the social and economic status of the people responding. Use these results to initiate class discussions on cultural differences and the causes of prejudice.

- View transparencies presentation on culture (*Cultural Differences, Culture, U.S. Citizen, American Subculture,* and *Law Enforcement Officials Represent Our Culture*).

- Investigate your own national origins to discover the reason your ancestors left their homeland.

- Discuss environment to show how it reflects culture. Look for similarities and differences (food, art, speech, religion, clothing, attitudes).

- Demonstrate through pictures from such magazines as *Ebony, Good Housekeeping,* etc., or by color skethces, how clothing reflects one's culture.

- Develop a chart showing on one side your major values,

beliefs, and attitudes. On the opposite side show how these factors affect your behavior and culture.

- List examples of nonmaterial and material components of your own culture.

- View and discuss films or phonodiscs on culture, *Culture and Crime, Time for Ideas: What Determines Taste? The Development of a Culture*, etc.

- Create a new culture. Make up your own rules, style of dress, etc.

- Debate the following statement: *Human behavior is not affected by culture.*

  Compile a list of the advantages and disadvantages of believing that your culture is the *best*.

- Write up a community description of a particular culture within your own community.

- Develop *critical incidents* from the area of social-service and discuss the possible reactions to these situations.

- Role-play as a social-service worker, or minority cultural member using a critical incident situation.

TEACHER MANAGEMENT ACTIVITIES

- Have the students distinguish between race and culture.

- Encourage discussion of questions such as:

  What is racial purity?
  Does cultural enrichment increase I.Q.?

- Allow students to conduct attitude surveys to explore the relationships between social-economic status and prejudicial attitudes towards certain culture.

- Give transparencies presentations on cultural factors, using such material as: *Cultural Differences, Culture, U.S. Citizen, American Subculture*, and *Law Enforcement Officials Represent Our Culture.*

- Encourage the students to discuss the concept that culture is a man-made environment.

- Show, and encourage discussion afterwards, films and phonodisc on our cross-cultural differences, for example, *Culture and Crime, Time for Ideas: What Determines Taste*, and *The Development of Culture.*

- As a writing exercise, have the students create a new culture of their own, making up customs, dress styles, etc.

- Encourage the students to participate in cross-cultural training exercises, such as: community descriptions, critical incidents, and role-playing situations from the field of public service.

- Bring in social-service workers who work with different cultural groups, and have them discuss the unique behavior patterns of these different cultural groups.

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Anthropology, Zdenek Salzmann, Harcourt Brace and Jovanovich, Inc., 1969.

Appendix A

RESOURCE SUPPLIERS

Appendix A

RESOURCE SUPPLIERS

This appendix is a listing of suppliers of resources itemized at the end of each unit of the individual sections.

Academic Recording Institute
4727 Oakshire
Houston, Texas 77027

Addison-Wesley Publishing Co., Inc.
Reading, Massachusetts 01867

Allyn & Bacon, Inc.
Rockleigh, New Jersey 07647

American Education Publications
Xerox Education Group
Education Center
Columbus, Ohio 43216

American Management Association
135 W. 50 Street
New York, New York 10020

Association Films, Inc.
600 Madison Avenue
New York, New York 10022

Association Press
291 Broadway
New York, New York 10007

Atherton Press
Aldine Publishing Company
529 S. Wabash Avenue
Chicago, Illinois 60605

William C. Brown Co., Publishers
135 South Locust Street
Dubuque, Iowa 52001

CENCO Educational Aids
2600 S. Kostner Avenue
Chicago, Illinois 60623

Churchill Films
6671 Sunset Blvd.
Los Angeles, California 90028

Classroom World Productions
516 West 34th Street
New York, New York 10001

Connecticut State Department
of Health
Public Health Education Section
79 Elm Street
Hartford, Connecticut 06115

Creative Visuals
Box 1911
Big Spring, Texas 79720

Daedalus Periodical
American Academy of Arts
and Sciences
7 Linden Street
Cambridge, Massachusetts 02114

Dartnell Corporation
4660 Ravenswood Avenue
Chicago, Illinois 60640

Delmar Publishers
Mountainview Avenue
Albany, New York 12205

Delta Books
Dell Publishing Company, Inc.
750 Third Avenue
New York, New York 10017

Doubleday & Company, Inc.
277 Park Avenue
New York, New York 10017

Fawcett World Library
1 Astor Plaza
New York, New York 10036

The Free Press
The Macmillan Company
866 Third Avenue
New York, New York 10026

Grove Press, Inc.
53 E. 11th Street
New York, New York 10003

Halgren Tests
873 Persimmon Avenue
Sunnyvale, California

Harcourt Brace Jovanovich, Inc.
757 Third Avenue
New York, New York 10017

Houghton Mifflin Company
2 Park Street
Boston, Massachusetts 02107

Imperial International Learning
247 West Court Street
Kankakee, Illinois 60901

Indiana University Audio-Visual Center
Field Services Department
Bloomington, Indiana 47401

Indiana University Press
Tenth & Morton Streets
Bloomington, Indiana 47401

Institutional Cinema Service
29 East 10th Street
New York, New York 10003

Irwin - Dorsey Press
Richard D. Irwin, Inc.
1818 Ridge Road
Homewood, Illinois 60430

Jossey-Bass, Inc., Publishers
615 Montgomery Street
San Francisco, California 94111

Lippincott, J. B., Company
E. Washington Square
Philadelphia, Pennsylvania 19105

The Macmillan Company
866 Third Avenue
New York, New York 10026

Charles E. Merrill Publishing Company
1300 Alum Creek Drive
Columbus, Ohio 43216

Metromedia Analearn
235 Park Avenue South
New York, New York 10003

McGraw-Hill Book Company
330 West 42nd Street
New York, New York 10036

National Education Association
1201 16th Street, N.W.
Washington, D.C. 20036

National Training Laboratories Institute for Applied Behavorial Sciences
1201 Sixteenth Street, N.W.
Washington, D.C. 20036

Oxford University Press
200 Madison Avenue
New York, New York 10016

Prentice-Hall, Inc.
70 Fifth Avenue
New York, New York 10011

Quadrangle Books, Inc.
Subsidiary, New York Times Co.
12 E. Delaware Place
Chicago, Illinois 60611

Rand McNally & Company
8255 Central Park Avenue
New York, New York 10022
or, Box 7600
Chicago, Illinois 60680

Fleming H. Revell Company
Old Tappan, New Jersey 07675

Warren Schloat Productions, Inc.
Division, Prentice-Hall Company
Pleasantville, New York 10570

Schocken Books, Inc.
67 Park Avenue
New York, New York 10016

Simon & Schuster, Inc.
630 Fifth Avenue
New York, New York 10020

Syracuse University Press
Box 8, University Station
Syracuse, New York 13210

Universal Education and Visual Arts
221 Park Avenue South
New York, New York 10003

University of Chicago Press
5801 Ellis Avenue
Chicago, Illinois 60637

University of Nebraska Press
Lincoln, Nebraska 68508

Van Nostrand Reinhold Company
450 West 33rd Street
New York, New York 10001

Western Publishing Company, Inc.
1220 Mound Avenue
Racine, Wisconsin 53404

John Wiley & Sons, Inc.
605 3rd Avenue
New York, New York 10016

H. Wilson Corporation
555 W. Taft Drive
South Holland, Illinois 60473

Appendix **B**

SUGGESTED EVALUATION QUESTIONS FOR PRE- AND POST-TESTS

Introduction

These tests are keyed to the Social Services guide of the Public Service Occupations curriculum.

The Social Services guide includes the following units:

Unit 1 — Social Service Agencies and Programs
Unit 2 — Why People Behave As They Do
Unit 3 — How Groups Behave
Unit 4 — Working With Community Organizations And Groups
Unit 5 — Individual Assistance Skills
Unit 6 — Influences on People
Unit 7 — Cross-Cultural Skills

These tests were developed to help teachers:

(1) measure student learning gain.
(2) determine if the instructional objectives have been met.

Test Contents

Any evaluation of student learning should adhere closely to the intended outcomes expressed in the written objectives. Therefore, each test is based on the specific instructional objectives found in its corresponding unit in the Orientation guide. Every item of each test is directly associated with one of the objectives found in the guide for that unit.

These tests are structured to help determine whether the student has become competent or not in each unit. The items for each test relate only to the instructional objectives found at the beginning of that unit in the guide. No test items refer to material found in previous or later units. Consequently, each unit in the teacher's guide and its corresponding test can be used independently.

The evaluative approach used in these tests is not designed to measure the relative standing of each student to an actual or hypothetical population. Rather, it is designed to report a student's performance solely in terms of objectives mastered or not mastered. Each student can reach or exceed the minimum performance standard or criterion. Hence, this testing is called criterion referenced testing.

Directions

The tests have been prepared as master copies which may be duplicated for student distribution.

There is a separate test for each unit of instruction in the curriculum guide. For example, test number one can be used as a pretest and a post-test with the content in Social Services Unit 1 — Social Service Agencies and Programs.

Because each class is unique, instructors may add or delete any test items desired.

These tests have been given under nearly every conceivable condition, formal group testing, informal individual sessions, and "take home" tests. In so far as can be determined, satisfactory results were obtained under every condition.

In response to the demand for a system that is easy to use, a convenient answer key for each test has been included in this folder.

The tests provide an objective method for determining student learning gain, while freeing teachers to use valuable time for instruction.

Validity

The validity of any test must be determined in reference to the particular use for which the test is being considered. As these tests are essentially measures of student achievement, they must have content validity. Content validity involves the systematic examination of the test content to insure that it covers a representative sample of the behavior domain to be measured. By employing questions that directly relate to the instructional objectives in each unit, content validity is insured.

An experimental edition of this test was field tested in twelve schools, which were selected on the basis of size of school and community. Over 1,000 secondary school students were involved in the validation testing. Socio-economic groups taking the test ranged from the disadvantaged to upper middle-class. The schools were also selected to gain a student population from urban, suburban, and rural areas. In each of the schools, the teacher first gave the students a pretest before the content was introduced. The same testing instrument was used as a post-test. The objectives were to measure student learning which took place as a result of studying the material in the instructional unit, and to establish criterion referenced tests for use by schools throughout the country. For this purpose, a percentage passing of 70 percent or above on the post-test was considered to be an acceptable criterion mastery for that unit. No norms were established for these tests. It is suggested that each student be able to successfully pass 70 percent of the questions for each instructional unit that he is tested on. During this field test, suggestions for improving these tests were also made. The criterion referenced tests in this booklet are based on the pretest and post-test material used in this validation study.

Other Means of Evaluation

It should be remembered that the instructor can use a wide assortment of test situations to evaluate students.

Students can assume the role of clients with the following problems: housing, inadequate income, lack of employment, poor physical or mental health, or involvement in a situation where police action was required.

Students can role-play social workers and clients from different cultural backgrounds, using a critical incident or a case study as a basis for the role-play.

After viewing a social service agency on videotape or film, the instructor can rate students on their ability to pinpoint the strengths and weaknesses of that agency.

The instructor may choose to show films of urban and rural communities, with each student listing the needs of those communities.

Any of the methods named may be used to complement the tests in this folder.

Acknowledgements

The Public Service Occupations tests were developed and field tested in twelve locations. While many people were involved in this project, the staff is particularly indebted to the following people:

Lillian Avery,	Test Research Center Los Angeles, CA
Victor Backstrom,	Long Beach Unified School District Long Beach, CA
Dr. William E. Burns,	State University of New York Buffalo, New York
William Crane,	San Diego Unified School District San Diego, CA
Thomas Franklin,	San Diego Unified School District San Diego, CA
Gilbert Garcia,	Sacramento City Unified School District Sacramento, CA
Lt. Charles Kane,	San Leandro Police Department San Leandro, CA
Dr. Nellie M. Love,	Sweet Home Central School District Amherst, New York
James B. Mayo,	Fremont Unified School District Fremont, CA
Myron Nadolski,	Grant Joint Union School District Sacramento, CA
Nadine L. Reed,	San Diego Unified School District San Diego, CA
James J. Reilley, S.J.,	Canisius High School Buffalo, New York
Rosalia Salinas,	San Diego Unified School District San Diego, CA
Paul E. Sugg,	Williamsville Central Schools Williamsville, New York
Tom Schrodi,	Orange Unified School District Orange, CA
Thea Stitum,	Sacramento City Unified School District Sacramento, CA

Project Staff

Patrick J. Weagraff, Ed. D., Project Director

James J. Lynn, Curriculum Specialist

Constance F. Gipson
Assistant Curriculum Specialist

Harold M. Blue, Senior Editor

Lillian Deger, Typist

Miriam Dong, Typist

Preparing for Public Service Occupations

Evaluation Questions

1

Unit 1 Social Service Agencies and Programs

1. Individuals seek social services for these types of problems:
- A. Banking and investments _____
- B. Curriculum planning _____
- C. Travel and recreation _____
- D. Social, economic, and personal _____

2. Services provided by social service agencies are paid for by:
- A. Social service agency clients _____
- B. Private industry _____
- C. Business and labor organizations _____
- D. Taxes _____

3. Problems of individuals seeking social agency services are frequently influenced by related factors, such as:
- A. Severe illness resulting in loss of job and financial problems _____
- B. Availability of employment and racial and ethnic discrimination _____
- C. Lack of stability in home life and effect on children _____
- D. All of the above _____

4. Public social service agencies are established by:
- A. Endowment foundations private charities _____
- B. Local, state and Federal governments _____
- C. Private industry and institutions _____
- D. Community groups _____

5. Goals, functions, and policies of social service agencies are set by:
- A. Laws and legislation that established public agencies _____
- B. Social service workers employed in public social agencies _____
- C. Community and business leaders _____
- D. Clients of social service agencies _____

6. A social services agency should consider changing its goals:
- A. When former clients have moved away _____
- B. When the agency's aims no longer meet the community problems _____
- C. When times have changed and the clientele have different experiences _____
- D. All of the above _____

7. A long-range goal of an agency could be:
- A. Assisting clients to solve social, economic, and personal problems _____
- B. Curing a present illness _____
- C. Preventing clients from becoming independent and self-sufficient _____
- D. Providing financial help for those without money _____

8. Day-to-day work in a public service agency is performed by:

A. Voluntary groups of citizens _____
B. Student trainees _____
C. Civil service employees _____
D. Members of social clubs and organizations _____

9. Candidates for jobs in a government social service agency must have objective qualifications based on:

A. Political affiliation _____
B. Membership in social organizations _____
C. Education and experience _____
D. Recommendations of others _____

10. Under the merit system, appointments to jobs are made on the basis of:

A. Ability to do the work _____
B. Interests and hobbies _____
C. Personal traits and characteristics _____
D. None of the above _____

11. Extensive anti-poverty legislation and new agencies have been established as the result of:

A. The need for more social service workers _____
B. Increased awareness of the needs of the poor _____
C. The great number of people who have no desire to work _____
D. Government controls and newspaper publicity _____

12. Typical jobs in a social service agency are:

A. Eligibility Worker; Case Worker _____
B. Social Welfare Worker; Health Worker _____
C. Social Service Aide; Community Aide _____
D. All of the above _____

13. A typical pre-professional entry level job in a social service agency is:

A. Clerical worker _____
B. Social Service Aide _____
C. Programmer trainee _____
D. Engineering Aide _____

14. Social Service agencies and their employees should be sensitive to the needs of their community by:

A. Establishing relevant and realistic goals _____
B. Establishing policies and programs that will meet the needs of clients _____
C. Seeking community or client representation on advisory or policy-making board of agency _____
D. All of the above _____

Answer Key

1. D	4. B	7. A	10. A	13. B
2. D	5. A	8. C	11. B	14. D
3. D	6. D	9. C	12. D	

Preparing for Public Service Occupations

Evaluation Questions

2

Unit 2 Why People Behave as They Do

1. Human behavior can best be defined as:
- A. What people do ____
- B. Understanding others ____
- C. Providing a service ____
- D. Setting goals ____

2. Behavior is influenced by:
- A. Agency goals and policies ____
- B. Personal needs, desires, and wants ____
- C. Economic trade ____
- D. Social insurance programs ____

3. Behavior is a process of:
- A. Group participation ____
- B. Adaptation to one's environment ____
- C. Making personal goals ____
- D. Career development ____

4. Social service workers can increase their effectiveness by:
- A. Showing clients what they are doing wrong ____
- B. Understanding the behavior of others ____
- C. Making clients personal friends ____
- D. All of the above ____

5. Students preparing for careers in social service should develop:
- A. Attitudes so they can understand human behavior rather than judging it ____
- B. Understanding of what causes human behavior ____
- C. Appreciation of human behavior patterns ____
- D. All of the above ____

6. A key ability for success in social service work is:
- A. Mathematical ability ____
- B. An eagerness to lead others ____
- C. An awareness of the feelings of others ____
- D. An ability to persuade others ____

7. Sensitivity to others means:
- A. Liking others ____
- B. Willingness to form working relationships ____
- C. Ability to handle unpleasant situations ____
- D. Accepting the difference of others ____

8. Rapport means:
- A. Planning social service programs _____
- B. Getting along with others _____
- C. Seeking information _____
- D. Applying knowledge to practical situations _____

9. Good relationships with others requires:
- A. Listening to and observing others _____
- B. Communicating with others _____
- C. Willingness to form and sustain working relationships _____
- D. All of the above _____

10. Acceptance of the behavior of others involves:
- A. Accepting everything someone does _____
- B. Convincing others that you are right _____
- C. A positive and active understanding of others' feelings _____
- D. None of the above _____

11. Behavior can reflect prejudice by:
- A. A display of unfavorable and hostile attitudes _____
- B. Expressions of personal bias _____
- C. Set ways of thinking _____
- D. All of the above _____

12. Prejudice is learned behavior through:
- A. Associations with prejudiced people _____
- B. Knowledge about other people and groups _____
- C. Contact between different individuals or groups of people _____
- D. Elimination of set ways of thinking _____

13. Social service workers must overcome biased attitudes because such attitudes:
- A. Increase the amount of social services needed by clients _____
- B. Prevent the providing of fair service to all people _____
- C. Have implications for developing new programs _____
- D. Increase knowledge about other people and groups _____

14. Social service workers should:
- A. Project an image of trust and confidence _____
- B. Be quick in judging situations and people _____
- C. Express personal feelings on various community issues _____
- D. All of the above _____

Answer Key

1. A	4. B	7. D	10. C	13. B
2. B	5. D	8. B	11. D	14. A
3. B	6. C	9. D	12. A	

Unit 3 How Groups Behave

1. Social psychology is the study of:
- A. Supervision and management of others ____
- B. Geography of social countries ____
- C. Individuals in social or group situations ____
- D. All of the above ____

2. Typical groups to which people belong are:
- A. Family ____
- B. Racial or ethnic ____
- C. Religious ____
- D. All of the above ____

3. Law enforcement officers need to know about:
- A. Educational programs ____
- B. Psychology of crowds ____
- C. Social insurance programs ____
- D. None of the above ____

4. Membership groups can be defined as:
- A. Those groups to which one belongs (family, community) ____
- B. Those groups to which one hopes to belong (social, civic) ____
- C. Special interest groups ____
- D. Occupational groups ____

5. Reference groups are:
- A. Social or sports groups ____
- B. Religious groups ____
- C. Community clubs and organizations ____
- D. All of the above ____

6. A reference group exerts pressures on the individual which can shape:
- A. World opinion ____
- B. Government programs ____
- C. Behavior and attitudes ____
- D. Social welfare programs ____

7. Individuals yield to group pressures by:
- A. Asserting their own personal beliefs and opinions ____
- B. Arriving at independent judgments ____
- C. Conforming to group values ____
- D. Demonstrating leadership qualities ____

8. Groups require leaders because:

A. It is easier to deal with an individual rather than a group _____
B. Groups function best with organization and direction _____
C. Group communications are more effective _____
D. Leaders always make good decisions _____

9. An effective leader:

A. Communicates _____
B. Plans programs, makes assignments, and marks out lines of authority _____
C. Sets clear group goals _____
D. All of the above _____

10. A democratic leader:

A. Lets the group do what it wants _____
B. Supervises work closely and keeps everyone busy _____
C. Allows policy to be determined by group discussion _____
D. None of the above _____

11. Good leaders, managers, and supervisors are in demand because they can:

A. Exert influence and initiate ideas _____
B. Direct and inspire others _____
C. Organize and formulate goals _____
D. All of the above _____

12. An effective leadership style produces:

A. Group atmospheres for getting work done _____
B. Higher status for all members _____
C. Emotional stability for all members _____
D. Friendship _____

13. The authoritative style of leadership can affect group communications by:

A. Keeping everyone busy _____
B. Creating an environment favorable to group communications _____
C. Creating a hostile and competitive atmosphere _____
D. None of the above _____

14. Leadership training:

A. Develops world opinion _____
B. Increases effectiveness of groups _____
C. Encourages acceptance of life role _____
D. Encourages acceptance by others _____

Answer Key

1. C	4. A	7. C	10. C	13. C
2. D	5. D	8. B	11. D	14. B
3. B	6. C	9. D	12. A	

Unit 4 Working with Community Organizations and Groups

1. Social service agencies sometimes employ:
- A. Private charity workers _____
- B. Civic groups _____
- C. Community Workers _____
- D. All of the above _____

2. Social service agencies will provide more successful services if they:
- A. Gain knowledge of the community _____
- B. Learn about problems _____
- C. Actively recruit persons who need services _____
- D. All of the above _____

3. Social service aides:
- A. Plan agency policy and programs _____
- B. Lead demonstrations _____
- C. Spread knowledge about the agency's services _____
- D. All of the above _____

4. When social service aides learn how the public feels about agency services, they should:
- A. Agree with them if at all possible _____
- B. State the agency's policy and stick to it _____
- C. Organize discussion groups _____
- D. Relay their findings to agency staff _____

5. An important task for the aide is to learn:
- A. Who in the community needs but is not using services _____
- B. Names of community residents _____
- C. The political affiliation of community residents _____
- D. All of the above _____

6. An aide needs to know about services offered, such as:
- A. Who is eligible _____
- B. Exactly what services are offered _____
- C. Hours of service _____
- D. All of the above _____

7. Social service aides gain knowledge of the community by:
- A. Talking to people about their problems _____
- B. Becoming a member of the Junior Chamber of Commerce _____
- C. Joining the Better Business Bureau _____
- D. None of the above _____

8. **Depending on the agency, social services aides may become specialists in such areas as:**
   A. Writing letters to the newspaper _____
   B. Housing, recreation or police protection _____
   C. Developing agency policy _____
   D. Environmental control and protection _____

9. **To be successful aides must:**
   A. Spend all of their time in the agency office _____
   B. Go out into the community _____
   C. Gather data and write reports _____
   D. Become a member of a local business association _____

10. **As agency employees, aides should:**
   A. Make their opinions known to the agency _____
   B. Disagree with agency policy _____
   C. Make significant changes in agency policy _____
   D. Work against agency policy if the agency is wrong _____

11. **Many of the skills required of social service aides have already been developed as:**
   A. Union members _____
   B. Students _____
   C. Citizens, parents, or active participants in the community _____
   D. Businessmen _____

12. **Aides are sometimes asked to organize community groups for the purpose of:**
   A. Organizing religious events _____
   B. Resisting government welfare programs _____
   C. Exchanging points of view _____
   D. Arranging political rallies _____

13. **Group efforts to solve community problems are more likely to succeed if:**
   A. Only a few people take active part in the planning _____
   B. All leadership and planning is done by the aide _____
   C. Planning and leadership is directed by the social welfare agency _____
   D. A number of people contribute their efforts to the leadership and planning _____

14. **It is a good idea for community groups to attempt to:**
   A. Solve one problem at a time, and then to move on to another _____
   B. Work on many problems at the same time _____
   C. Ignore the needs of the community _____
   D. Work only on simple problems _____

Answer Key

1. C	4. D	7. A	10. A	13. D
2. D	5. A	8. B	11. C	14. A
3. C	6. D	9. B	12. C	

Unit 5 Individual Assistance Skills

1. Attitudes affect
- A. Beliefs and principles ____
- B. Plans and actions ____
- C. An individual's value system ____
- D. All of the above ____

2. Social service aides are often selected for their jobs because they:
- A. Are available for employment ____
- B. Know the right person in the agency ____
- C. Have a college education ____
- D. Have a natural concern and interest in people ____

3. The agency must provide service in a manner that:
- A. Prevents the client from making his own choice ____
- B. Insists that the client abide by the rules and guidelines of the agency ____
- C. Shows respect for the client's ability and right to make his own choice ____
- D. Proves to the client that the aide knows what is best for him ____

4. Social service interviewers should:
- A. Do most of the talking ____
- B. Listen to the client ____
- C. Interrupt the client ____
- D. Criticize the client ____

5. When aides disapprove of their client's behavior, they should:
- A. Show their disapproval ____
- B. Understand individual differences ____
- C. Refuse to assist the client ____
- D. Send the client to another social service worker ____

6. The social service worker may lessen the client's desire to communicate by:
- A. Being critical ____
- B. Being agreeable ____
- C. Approval ____
- D. Joking with the client ____

7. In structuring an interview, the social service worker must:
- A. Ask questions about the personal affairs of the client ____
- B. Ask questions that are not related to the client's problem ____
- C. Ask questions to get additional facts ____
- D. Not question the client ____

8. The social service workers should word questions in a:

A. Disinterested manner _____
B. Tactful manner _____
C. Joking manner _____
D. Critical manner _____

9. The worker's relationship with clients should be one of:

A. Impatience _____
B. Cooperation _____
C. Mutual indifference _____
D. Indignation _____

10. The questions on the agency's form are helpful in:

A. Income tax information _____
B. Determining the political affiliations of a client _____
C. Directing the interview _____
D. Determining a client's interests and hobbies _____

11. Social service workers must know all services the agency provides to determine:

A. What reports are necessary _____
B. How to change agency policy _____
C. When to provide information to the news media _____
D. When a client is eligible _____

12. If the agency does not provide the services needed, it should:

A. Refer the client to the appropriate agency _____
B. Explain to the client that he is ineligible, and send him away _____
C. Suggest to the client that he contact other agencies in the community _____
D. Tell the client to return after the law has been changed _____

13. The role of the social service worker is to:

A. Make sure that the client fills out all agency forms _____
B. Suggest to the client that he try to find his own solutions to his problems _____
C. Tell the client what the agency does _____
D. Find the client ineligible for services _____

14. Social service aides should have good working relationships with other agencies to:

A. Develop new friends _____
B. Increase their salaries _____
C. Find better jobs _____
D. Make referrals _____

Answer Key

1. D	4. B	7. C	10. C	13. C
2. D	5. B	8. B	11. D	14. D
3. C	6. A	9. B	12. A	

Unit 6 Influences on People

1. **The social service worker should strive to:**
   A. Ignore human behavior ____
   B. Display his knowledge of human behavior ____
   C. Understand how social and physical needs direct behavior ____
   D. None of the above ____

2. **Human beings try to adjust to life by:**
   A. Searching for food, water, and rest ____
   B. Obeying or defying the law ____
   C. Performing work or remaining idle ____
   D. All of the above ____

3. **Social services workers need to understand why people behave as they do, to:**
   A. Appraise human needs ____
   B. Provide needed services ____
   C. Limit human behavior ____
   D. Imitate the behavior of others ____

4. **Physical drives motivate human beings to:**
   A. Make new friends ____
   B. Satisfy bodily needs ____
   C. Plan and attend meetings ____
   D. Keep in good shape ____

5. **The most intense of all our physical needs is our:**
   A. Need for air ____
   B. Hunger and thirst drive ____
   C. Sexual drive ____
   D. Need for sleep ____

6. **Social service workers should be aware that:**
   A. Social motives affect behavior ____
   B. Different cultures exhibit different social motives ____
   C. Individuals seek social approval from their peers ____
   D. All of the above ____

7. **Social service workers should:**
   A. Classify value systems ____
   B. Remember that individuals have different sets of values ____
   C. Attach small importance to value systems of their clients ____
   D. All of the above ____

8. Individuals will seldom be interested in such activities as staying in school, if:

A. They have experienced failure or ridicule _____
B. They have been successful _____
C. They excel in some area _____
D. They succeed most of the time _____

9. The mature adult tries to:

A. Adapt his value system to new experiences _____
B. Cope with or reduce tensions _____
C. Create and maintain a stable social environment _____
D. All of the above _____

10. Social service workers should recognize the needs, interests, values, and emotions that influence the way people behave because:

A. Unsatisfactory behavior may be related to social problems _____
B. More information is needed about behavior problems _____
C. Services cannot be provided to persons with behavior problems _____
D. Persons with behavior problems do not need social services _____

11. Hunger is:

A. A psychological drive _____
B. A social drive _____
C. A physical drive _____
D. All of the above _____

12. These drives are mainly inborn:

A. Biological drives _____
B. Psychological drives _____
C. Social drives _____
D. All of the above _____

13. Which statement is incorrect:

A. The need for social approval is present in all people _____
B. Human beings have similar sets of values _____
C. Curiosity is a human need _____
D. Temperature can influence behavior _____

14. Which statement is correct:

A. It is impossible to anticipate bodily needs _____
B. The biological needs of adults are permanently satisfied _____
C. It is generally felt that social motives are inherited _____
D. Motives can be inborn or learned _____

Answer Key

1. C	4. B	7. B	10. A	13. B
2. D	5. A	8. A	11. C	14. D
3. B	6. D	9. D	12. A	

Unit 7 Cross–Cultural Skills

1. **Social service workers must understand different cultural backgrounds because they must:**
   A. Come in frequent contact with cultural minorities _____
   B. Realize the dignity, worth and basic rights of all people _____
   C. Understand how cultural differences affect individual behavior _____
   D. All of the above _____

2. **Race is a term used to describe large groups of persons who possess:**
   A. Common hereditary traits _____
   B. Racial superiority _____
   C. Specific skills and customes _____
   D. All of the above _____

3. **There are:**
   A. Pure human races _____
   B. No pure human races _____
   C. As many nations as there are cultures _____
   D. As many races as there are nations _____

4. **The term culture refers to:**
   A. Racial characteristics _____
   B. Physical characteristics _____
   C. Folk ways and customs _____
   D. All of the above _____

5. **As cultures change, they affect:**
   A. Languages _____
   B. Man and Society _____
   C. Political climate _____
   D. All of the above _____

6. **Cultural change may be fostered by:**
   A. Travel to new places resulting in exchange of ideas _____
   B. Bias and prejudice _____
   C. Lack of interest in others _____
   D. Legislation and strict control _____

7. **Culture may be reflected by:**
   A. Language and ideas _____
   B. Dress _____
   C. Customs and behavior _____
   D. All of the above _____

8. Culturally biased attitudes exist because individuals tend to:

A. Evaluate another culture on its own terms _____
B. Have an open mind _____
C. Judge another culture by their own standards _____
D. Broaden their knowledge about others _____

9. The television media can encourage cultural bias by:

A. Making sure that their writers are factual _____
B. Fostering an awareness of cultural differences _____
C. Portraying people of various ethnic groups as ignorant _____
D. Scheduling programs that provide for a cross-cultural exchange _____

10. Prejudice and discrimination against cultural minorities:

A. Have value in dealing with others _____
B. Meet the needs of the people _____
C. Are good for the country _____
D. Continue to work against human fulfillment _____

11. A description of a community would be helpful in providing:

A. Information on different viewpoints _____
B. Manufacturing and production trends _____
C. Information on products and services _____
D. A general orientation to the area, the people, and the culture _____

12. Body language often reflects a particular culture, and is defined as:

A. Verbal communication _____
B. Non-verbal communication _____
C. Biological communication _____
D. A foreign language _____

13. Biographical descriptions of clients will provide a social worker with:

A. Information for a book _____
B. Date for a statistical report _____
C. Knowledge of the person's behavior and attitudes _____
D. Basis for legal action _____

14. The effective social service worker:

A. Accepts the fact that culture does influence individual behavior _____
B. Is aware of and considers the feelings of others _____
C. Is willing to accept other points of view _____
D. All of the above _____

Answer Key

1. D	4. C	7. D	10. D	13. C
2. A	5. D	8. C	11. D	14. D
3. B	6. A	9. C	12. B	

Project Staff

Patrick J. Weagraff, Ed. D. ..... Director
James J. Lynn, M.S. ..... Curriculum Specialist
Harold M. Blue ..... Editor
Jean Smith ..... Reproduction Typist
Miriam Dong ..... Reproduction Typist
Lillian Deger ..... Reproduction Typist
Karen Mason ..... Reproduction Typist
Mary Sullivan ..... Typist

GPO 693-477/274

ACCESSION NUMBER: VT102229

PUBLICATION DATE: 22AUG74

TITLE: DEVELOPMENT OF MODULAR COURSES IN VOCATIONAL CURRICULUM TO FACILITATE INDIVIDUALIZED SCHEDULING TO MEET THE OCCUPATIONAL OBJECTIVES OF EACH STUDENT.

PERSONAL AUTHOR: STABER, RICHARD; EVERETT, CARL

DESCRIPTOR: *CAREER EDUCATION; *SCHEDULE MODULES; *CURRICULUM DEVELOPMENT; PROGRAM DESCRIPTIONS; ELEMENTARY GRADES; MIDDLE SCHOOLS; SECONDARY GRADES; OCCUPATIONAL GUIDANCE

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 163P.

ABSTRACT: THIS DOCUMENT DESCRIBES THE PROGRAM OF ADJUSTMENT ADOPTED BY THE CENTRAL COLUMBIA HIGH SCHOOL IN BLOOMSBURG, PENNSYLVANIA TO FACILITATE THE TRANSITION TO CAREER EDUCATION. THE ELECTIVE SEMESTER COURSE SYSTEM WAS ADOPTED TO ENABLE THE STUDENTS TO TAKE ADVANTAGE OF AS MANY COURSE OFFERINGS AS POSSIBLE. A FULL-TIME GUIDANCE COUNSELOR WAS HIRED TO WORK EXCLUSIVELY WITH THE VOCATIONAL STUDENTS TO ATTEMPT TO MEET THEIR PARTICULAR NEEDS. ANNUAL TEACHER WORKSHOPS WERE HELD TO FAMILIARIZE TEACHERS WITH THE CONCEPTS OF CAREER EDUCATION AND WITH WAYS TO INCORPORATE CAREER EDUCATION INTO THE CLASSROOM EXPERIENCE. ALTHOUGH MANY NEW CAREER-RELATED COURSES WERE ADDED AT THE HIGH SCHOOL LEVEL AND AT THE ELEMENTARY AND MIDDLE SCHOOL LEVELS, CAREER EDUCATION WAS INFUSED INTO EXISTING COURSES ELIMINATING THE NEED FOR MASSIVE CURRICULUM CHANGE. AN IMPORTANT FEATURE OF THE PROGRAM WAS THE UTILIZATION OF A COMPUTER TO EXPEDITE SCHEDULING. APPENDIXES TO THE REPORT LIST COURSE OFFERINGS, A FOLLOWUP GRADUATE CAREER SURVEY, AND OTHER PROJECT-RELATED MATERIALS. (NJ)

INSTITUTION NAME: CENTRAL COLUMBIA HIGH SCHOOL, BLOOMSBURG, PA.

SPONSORING AGENCY NAME: PENNSYLVANIA STATE DEPT. OF EDUCATION, HARRISBURG. BUREAU OF VOCATIONAL, TECHNICAL, AND CONTINUING EDUCATION.

VT 102 229

20-3001

DEVELOPMENT OF MODULAR COURSES IN VOCATIONAL CURRICULUM TO FACILITATE INDIVIDUALIZED SCHEDULING TO MEET THE OCCUPATIONAL OBJECTIVES OF EACH STUDENT

By Richard Staber
Carl Everett

Central Columbia High School
4777 Old Berwick Road
Bloomsburg, Pa. 17815

August 22, 1974

Pennsylvania Department of Education

Bureau of Vocational Technical and Continuing Education

VT 102 229

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ACKNOWLEDGEMENTS

We are deeply indebted to the following resource people who made commendable contribution to the Central Columbia School District Career Education effort. We sincerely thank them for the "above the call" time and effort extended on our behalf.

Dr. William Williams	College of Agriculture Pennsylvania State University
Mr. John Rupert	Vocational Guidance Division Pennsylvania Dept. of Education
Dr. Carroll A. Curtis	Research Coordination Unit Pennsylvania Dept. Of Education
Dr. Clarence Dittenhafer	Research Coordinating Unit Pennsylvania Dept. of Education
Mrs. Marie Clark	Career Education Bureau Central Susquehanna Intermediate Unit
Mrs. Kathleen Gearhart	Career Education Bureau Central Susquehanna Intermediate Unit
Dr. Carl Pepperman	Career Education Bureau Central Susquehanna Intermediate Unit
Mrs. Patricia Shapiro	Bureau of Labor Statistics United States Department of Labor

ABSTRACT

Career Education is a program thats time has come. When Dr. Sidney P. Marland, former United States commissioner of education, reported that ". . . eight out of ten present high school students should be getting occupational training of some sort, but only about two of those eight are, in fact, getting such training," the urgent need for the initiation of such projects became very apparent. The institution of Career Education programs into school curriculums serves several imperative purposes. Career Education fulfills students requests for course relevancy to "real world" experiences, promotes satisfaction among workers, saves individual employers time and money, and helps to regulate the overall job market by curbing inefficient oversupply or undersupply of workers in specific fields within their area.

One of the most frequent requests of students made to the educational system is for their courses of study to relate to the "real world." The "ivory tower" concept of education being "a world of its own," far removed from the reality of the working world has been a persistant one. This aspect of the educational system is reinforced and emphasised by parental adages such as, "You think life is tough now, wait until you have to work for a living!" Thus students are justified in their need to understand how today's world of learning is interrelated with tomorrow's world of work. In traditional school systems, some students find quite a gap between the two worlds. In

David Gottlieb's America's Other Youth, growing up poor, he quotes a male high school youth describing this gap:

> Anyhow I got to a vocational high school, and when my marks were so good they put me in academic classes ... So I'm not getting the right training for my vocational course and I'm not getting enough training for my academic course. I'm sort of like in between. So if I want to go to college, I'm going to have to take extra courses at night school ... Even if I wanted to become a garage mechanic, I'm going to be in the same spot ... Nobody has the right training ... They can't go to college; they haven't got the right training for a trade.

This is the case of a student who found an irresolvable gap between the two life experiences. An organized, comprehensive Career Education program is intended to bridge this gap.

In addition, Career Education programs provide a service to individual workers, after they have graduated and entered their working careers. If a student follows the United States Office of Education model for Career Education while he is in school, by the time he graduates from high school, he will have passed through three phases of Career Education -- "career awareness" in his elementary years, "career exploration" in his middle school years, and "career preparation" in his high school years. This extensive career training would provide the worker with a working knowledge of the job market and should prevent him from meaningless drifting into jobs, instead enabling him to make deliberate career decisions. Therefore, because of the worker's knowledge and ability to choose his career,

he may express more satisfaction with, and better adjustment to his career position.

Career Education programs also save time and money for individual employers by sending graduates into industry who are trained and ready to work, thus minimizing the need for initial, entry level industrial training programs. The institution of effective Career Education programs would preclude problems such as the one previously described by the high school student, by furnishing industry with adequately prepared employees. Anthropologist Estelle Fuchs of the City University of New York reiterates the need for better preparation of students for the world of work. In her book, Teachers Talk, she states her findings that schools have been "slow to respond to the new social requirements . . . to prepare them (students) for a world of work resulting from accelerated automation and increased urbanization.

Finally, a well planned Career Education program would be watchful of job market trend statistics and projections. Thus vocational counselors would be able to counsel students away from "flooded" occupational areas and toward vocations in need of additional personnel. In this manner, Career Education programs could help to stabilize the job market by minimizing oversupply and undersupply of workers in specific areas.

Thus comprehensive Career Education programs would serve the needs of students, workers, employers, and the overall job market.

But, as Estelle Fuchs implies, an effective Career Education program must not only be initiated by district administrators, but also must be well received by classroom teachers. Fuchs cautions:

> Directives issued from the leadership are not in themselves guarantees of successful carrying out of new programs. Students of bureaucratic organization have shown that this is due to the fact that lower-echelon personnel have a tendency to continue functioning as they have always done. More specifically, where lower-level functionaries do not accept the change, or do not believe it to be realistic or practical, they can effectively prevent the effectiveness of the new program.

Thus a cooperative, concerted effort on the part of all of the educators involved is required to achieve a successful program.

The following publication is a description of the attempt made at such a program by Central Columbia School District. The program has not been free of disappointments and setbacks, yet we conclude our three year effort with an even greater conviction than when we began that Career Education is a program thats time has come.

INTRODUCTORY SECTION

METHODS

With the incorporation of Career Education into the Central Columbia School District, many changes were necessitated to accommodate the program and insure its success. Such changes are very necessary when a new system is instituted to prevent reversion toward the mean behavior, or the return to pre-program behavior with the only changes being the new program's labels and terms. Although "A rose by any other name would smell as sweet," the truism doesn't extend to the educational system. A stagnant educational system that merely changes its terminology in the face of new needs and educational trends, is totally self-defeating. Hence, along with the adoption of the Career Education program at Central Columbia, an ongoing program of adjustment was instituted to facilitate the successful transition to Career Education. Surveying the last three years, since the adoption of our Career Education program, a chronological list of developments is as follows: change to semester length courses, hiring of a vocational guidance counselor and the institution of a vocational guidance system, teacher workshops in Career Education, extension of the Career Education program from the high school to include the elementary and middle schools, adoption of the United States Office of Education (U. S. O. E.) model of Career Education, infusion efforts, new materials for Career Education, computer utilization to expedite scheduling, new programs

for the curriculum, and association with the Pennsylvania State Career Development Project.

Our early efforts at Career Education at Central Columbia were restricted to high school programs. One of the early changes which affected the Career Education program was the adoption of the elective semester course system. Because these courses are elected by the students, and because they last only one semester rather than the entire year, there are many more courses and new courses in more specialized areas. (See Appendix A, Course Listings) Since there are so many new courses available to the students that are associated with Career Education, and also since students are able to choose a greater number of courses due to the shorter length, there is a much greater opportunity for blending of Career Education and academic subjects.

A vocational guidance system was one of the foremost priorities of the new program. In previous years, the preparation of academically oriented students for college has been much higher on the list of educational priorities than preparing the non-academic student for the world of work. "Good schools" were high schools that had large numbers of their students accepted into "good colleges." The success of a high school's non-college bound students rarely affected a school's rating. The guidance counselor reaps much praise if Johnny is accepted at Harvard, even though he may have had little to do with Johnny's

decision or Harvard's acceptance. Yet, hours may be spent trying to find Sam a job, and when the counselor lands him a job in the local factory, the only rewards may be intrinsic ones. Thus, with the adoption of Career Education, this double standard may be beginning to crumble. Now both academic and vocational students have a full time guidance counselor expending his total efforts in an attempt to meet each group's particular needs.

Teacher workshops held annually for the past three years have had unquestionable value in "spreading the word" about Career Education. Because of the early initiation of our Career Education program, little information was available at the outset in the area of Career Education. These workshops proved an invaluable service in familiarizing teachers with the concepts of Career Education. Teachers who attended the summer workshops took their ideas back to their departments and emparted their newly acquired knowledge to other members who had been unable to attend the summer sessions. In this manner, a grassroots method of familiarization with the project was effected. This method promoted departmental discussions and considerable enthusiasm among the teachers. The first two summer workshops dealt with how Career Education could be incorporated into the classroom experience. Teachers designed individual career-related projects that they could use within their subject areas. The third workshop, (Apperdix B) dealt with methods of coordinating a total Career Education program within a school system. The change in workshop emphasis occurred because teacher familiarity with Career

Education seemed adequate, but an organizational flaw remained in the system. In the process of reevaluation of our program at Central, it became apparent that a system of organization must be devised to prevent "overlap and gap" in the program. In other words, each student should be exposed to a well balanced overview of available careers rather than a haphazard exposure that may be redundant as well as sparce.

The extension of the Career Education program to include the elementary and middle schools was a logical expansion of the project. This extension acknowledges the developmental nature of the child's need for Career Education. Such things as good work habits, fundamental aspects of decision-making, and acquaintance with career options and job types can be instilled in children at an early age.

The adoption of the United States Office of Education (U. S. O. E.) model of Career Education aided the organization of the newly expanded K-12 program considerably. The U. S. O. E. model of awareness (K-4), exploration (5-8), and preparation (9-12) divided the thrust of the program into three logical developmental stages that could be more easily dealt with. (Appendix C, page 8, Diffusion Project) The U. S. O. E. also provided a model of fifteen career clusters. The adoption of this model was particularly helpful because students would be exposed to a uniform grouping of job types rather than the confusion caused by using several competing job classification systems concurrently.

Although many new career-related courses were added on the high school level, the infusion effort has eliminated the need for massive curriculum change, especially at the elementary and middle school levels. By "infusion" we mean that the educators, already overburdened by requests for additions to the curriculum, not "add" special Career Education courses, but rather that they "infuse" Career Education into the appropriate sections of already existing courses. It is a question of teacher emphasis on Career Education, rather than an administrative curriculum change.

Dynamic new Career Education teaching materials are now available or being developed. For the kindergarten through fifth grades, A Highway to Work and Play (workbook) and It's in the Bag (hats, clothes, tools and Popeye WOW characters in a grab bag format) encourage imaginative pretending and role playing by the children in addition to providing basic Career Education information. For the fourth through seventh graders, our program has Popeye Career Comics, which help students to realize the wide variety of possible careers through one of their favorite media — the comic book. Career Cluster Packets, which provide information on many careers within each of the fifteen clusters, are available upon request according to student interest in grades five through nine. Students in grades five through twelve can view microfiche descriptions of a great variety of occupations on a viewer in the guidance office. Career Monographs are also available

for ninth through twelfth graders. Thus, by the time a student graduates, he should have had ample exposure to available career opportunities.

Another change within the district is the computer utilization to expedite scheduling. This became necessary when the adoption of semester electives and new courses related to Career Education made traditional scheduling methods overly cumbersome.

We are particularly pleased with new programs that are outgrowths of our Career Education thrust. One of these new programs is a consortium effort funded jointly by the Northcentral Pennsylvania Area Health Education System and Central Columbia School District to train medical and dental secretaries. This new program consists of regular business courses, a course in medical/dental terminology, an American Medical Record transcription course, and a work study program in the medical-dental secretarial field. (See Appendix D)

Another recent program, as a final thrust to our three year Career Education effort, was an incentive program to encourage creative departmental brainstorming on the part of educators for new course proposals in the area of Career Education. Under this program, each department was encouraged to submit Career Education course proposals by being offered payment to each member of each department that made a contribution. The products of this effort are Appendix E.

While all of these projects are exciting, one that is particularly encouraging is project SPROUT. This is the case because SPROUT deals with youth who are traditionally the failures of the educational system -- the dropouts. The program is designed to recycle the wasted manpower of the dropout in one of three ways:

1. Schooling, with options for GED or attending high school, arranging for attendance at a local community college, or arranging for attendance at a local trade school.

2. Training on-the-job for the participant, with options for GED, an apprenticeship arrangement, or specific skill or trade development activities.

3. Direct employment in a job where the participant will have options of the GED or an unskilled or a semi-skilled job.

In the field of Career Education, the SPROUT project has the distinction of being the program that aids youth who need the most help in the world of work. (See Appendix F)

As we, at Central Columbia, have been developing this program of Career Education as described, parallel projects have been conducted elsewhere. One of these projects has been the Pennsylvania Career Development Guide Project, a massive research effort of Pennsylvania

State University. Because of our early interest in the Career Education field, we were very pleased to have the distinction of being requested, along with fifteen other school districts across the state, to attend workshops on their "Field Test Copy" of the Guide. The purpose of their guide, according to its introduction, "is to offer local school districts a conceptual framework supportive of providing all students in grades K to 12 with a set of learning experiences designed to facilitate their career development." At Central, we concluded that we need most aid in program design at the elementary level. Our project proposal for the Penn State program was for the K through 4 grades. (See Appendix G) Thus a first grade teacher, a second grade teacher, a third grade teacher, a fourth grade teacher, an elementary guidance counselor, and the Career Education director are to attend the workshop at Penn State University. The workshop will provide additional knowledge and the accepted proposal provides additional funds to insure continued momentum for our ongoing thrust in Career Education.

Hence, we look back upon the developments of the past three years since we began Career Education at Central Columbia, not with the attitude of a three year project recently completed, but of an expanding young project with three years of foundation. Our recent programs with Northcentral Area Health Education System, our department teachers, Pennsylvania Department of Labor, and Pennsylvania State University are evidences of new directions in which we are beginning to grow.

FINDINGS AND ANALYSIS

The analysis of new educational programs is always a difficult but necessary task. Valid evaluations are time consuming, yet educators are concerned that change is made to upgrade the level of education rather than change for the sake of change, or change to make the district appear progressive. Thus educators must question the validity and reliability of each new program. Unfortunately, there are some obvious difficulties involved in such evaluations. Unlike scientific analysis, the analysis of educational programs is typically lacking a very important aspect -- the control group. When a school district adopts a program, it generally does so totally, not keeping a sample group out of the new program for the sake of comparison. Hence, to compare and contrast the newly installed program to the way the curriculum was previous to the change made when the new program was installed, evaluators must become heavily reliant upon the memory factor. The memory factor can produce faulty results in two basic ways:

1. Those who dread change may recall "the good old days" before the new program complicated teaching.
2. Those who have "taken up the cause" of the new program tend to remember the time before the change as terribly lacking.

Other factors that influence the objectivity of evaluating a new program are the Hawthorne, Halo and Pygmalion effects. The Hawthorne effect suggests that <u>any</u> change initially produces improved

reactions and results because of its inference to the subjects that an effort is being made in their behalf to attempt to improve conditions. The Halo effect is particularly plaguing when a school district is self-evaluating one of its own programs. This phenomenon indicates that an evaluator may have an unconscious wish to prove the program worthwhile, and that this unconscious factor can permeate all intentions of objectivity. Lastly, the Pygmalion effect suggests that teacher expectation greatly affects student behavior. This individual subjectivity necessitates the realization that teacher enthusiasm for the program will greatly affect all student reactions.

With the recognition that these subjective aspects of evaluation occur, we at Central Columbia maintained our attempts to overcome these problems throughout the evaluation. We based our evaluation on a wide variety of evidence including interviews with educators, interviews with students, vocational course enrollment figures, and vocational course mix statistics in the area of Career Education. We have made a sincere effort at an effective evaluation of our own program, keeping in mind possible obstacles. The following are our findings:

We interviewed the elementary school principal, the middle school principal, a middle school guidance counselor, the high school principal, a high school guidance counselor, the work study program coordinator, and the superintendant of schools. They were questioned about the Career Education program on the following points: thoroughness,

coordination effort, acceptance, breakdowns of the program, usage of the Career Education supplies, academic students and Career Education, outside resource personnel and field trips, and the Liberal Arts versus Career Education conflict theory.

On the topic of thoroughness, the elementary school principal reported that since the program was still growing, it was not yet as thorough as it would be in the future. At the middle school level, individual differences in teachers' acceptance was noted as a factor which determined how thoroughly Career Education was presented. At the high school level, all of those interviewed indicated that they believed the program was thorough enough.

All of the interviewed educators stated that quite an effort is now being undertaken to develop a well coordinated program from kindergarten through the twelfth grade. The third Career Education workshop was devoted to the problem of intra-district coordination. (See Appendix B.) It was noted that the most problematic stages were those years when students changed from elementary to middle school, and from middle to high school. It was suggested that better communication between schools would alleviate this transitional problem. It was also noted that the coordination aspect of Central Columbia's Career Education program lacked in personnel since the district Career Education coordinator was also the high school vocational guidance counselor. The middle school guidance counselor mentioned that the program was still in an "organizational struggle" stage and that a follow-up system was being adopted. Under this system, cards on each

student would record his exposure to specific Career Clusters encountered on school sponsored field trips. This system would allow teachers to find out in which areas their students have had field experiences and in which areas they are lacking.

Reactions of those interviewed were mixed about teacher receptivity to the Career Education program. Some said that the teachers were enthusiastic and adapted well to the new program. Others stated that teachers felt they were teaching the same thing before and now the concept is overemphasized. One os those interviewed again indicated that teacher receptivity depended on the individual teacher. It is interesting to note that those educators dealing with the higher grades indicated that teachers were most receptive, while teachers in the lower grades, who already stressed community study, think that Career Education may be overstressed. All of those interviewed reported that the student response to Career Education was very favorable. Also, the educators emphasized that students thought Career Education linked the school experience to later life. Guidance counselors indicated that more students seek out career information since the institution of the new program.

Reactions were positive to the question about whether new Career Education materials purchased for the program, such as Pennscript microfishe or Career Comic books, were being utilized in the classroom. Career Education materials seem to be popular and the students' increased career knowledge was evidenced by test results in the career tests.

Eighty percent of the educators interviewed stated that the major breakdown in the new program was that additional personnel was needed. Other suggestions were that overall long term objectives from K-12 could be better defined and that more students, including academic students, should become involved in the work experience program if they are to get a more rounded education.

The question, "Are all students being exposed to Career Education, even those who appear to be college bound?" was asked, but this question did not really apply to the elementary and middle school levels, where no real distinction is made between college and work bound students. On the high school level, it was noted that all students are being reached with Career Education packets, field trips, and other aspects of the Career Education program, yet academic students may be able to benefit even more from our growing program especially in the extended work experience program.

To the question of whether outside resource personnel was utilized in the form of field trips and guest speakers, the response was very favorable. Trips and speakers from local businesses, industry, and skilled trakes are presented to the students and received enthusiastically.

Finally, the educators were asked if they thought that Career Education was being intergrated into the school curriculum at the expense of the students' liberal arts education. The general consensus among those interviewed was that a balance must be achieved, with liberal arts education and Career Education complementing each other, if the best possible education for the students is to be attained.

The new superintendant of schools at Central Columbia was very positive in his assessment of the importance of the Career Education project. He stated that our task of preparing students for later life is greatly enhanced by the ongoing Career Education effort.

A follow-up survey in questionaire form was mailed to 1973 graduates of Central Columbia High School. (See Appendix G.) Fifty-two percent of the graduates returned the questionaire. Of the eighty-one graduates who responded, forty-two are now in college or another institution of higher learning, and thirty-nine graduates are now working. These working students contributed the following pertinent information:

1. Thirty-three of work bound students are now holding full time jobs; three are employed part time, and three are in the military service.

2. Twenty-two of the thirty-nine had the work study experience in high school.

3. After leaving high school, twenty-nine of the thirty-nine wanted employment in their field of occupational study while in high school.

4. More students got their first job after high school through the school co-op program than any other method.

5. Seventy-two percent, twenty-eight out of thirty-nine working students, have stayed in the same job since they graduated from high school. No students have had more than two jobs since graduation.

6. Twenty-six of thirty-nine students had arranged for their first job before they graduated from high school.

7. Thirty-three former students of the thirty-five who responded to the question had a favorable response to the elective eighteen week semester system.

8. More than twice as many students reported that their high school courses gave them good or excellent preparation for later life than reported that their preparation was either fair or poor.

These statistics tend to indicate a general stability of the graduates in their jobs as well as a satisfaction with the aspects of the curriculum which have been derived from the institution of Career Education at Central Columbia.

The enrollment figures for 1973-1974 (Appendix H) indicate the number of Central Columbia students that took vocational courses last year. Eighty-four percent of the students at Central Columbia High School were enrolled in vocational courses during the 1973-1974 school year! Thirty-nine percent of the students had at least three vocational courses and a few students had as many as eight.

Vocational mix figures illustrate the fact that forty percent of the Central students for the 1973-1974 academic year elected vocational courses in more than one department. (See Appendix I.) The five possible departments which offer courses are: vocational agriculture, industrial arts, home economics, distributive education and business. These statistics reveal that Central Columbia students are not only electing vocational courses, but they are experimenting in different areas, attempting to realize what area of the world of work they find most agreeable.

In the wake of current disenchantment with and protest against educational practices, Mr. Richard Staber, director of Career Education at Central Columbia High School, affirms his belief that Career Education puts the educational process in the "proper perspective." This is because Career Education emphasizes the premise that <u>educators are primarily in the preparation business</u>, therefore their foremost responsibility is to ready their students for later life. After the initial publicity explaining the recently installed Career Education program, Mr. Staber reports that he had numerous calls from the community stating that they were glad the district is "finally doing something to help the kids."

The director stressed that Career Education is <u>not</u> only education for a job, but rather should be geared around the rigors of life, including the enjoyment of the "finer things." This inclusion is particularly significant because of the recurring criticism lodged

against Career Education that the program denies the appreciation for aesthetics inherent in a liberal arts approach. Mr. Staber proposes that a fully developed Career Education program should include preparation for all of the following aspects of life:

1. students' preparation for their immediate future in the world of work
2. understanding and dealing effectively with one's emotions and attaining good mental health
3. marriage
4. parental responsibility
5. effective citizenship skills at the local, state, and national levels and learning to cope financially with a fluctuating U. S. economy
6. wise use of leisure time

It is obvious that the concept of "Career Education" encompasses a broad spectrum of preparatory education. One os the major breakdowns in the implementation of this type of a program is that many educators are not prepared to handle many of the facets mentioned above. What is needed to correct this deficiency is continued education for those educators not presently capable of handling the types of Career Education being proposed. Also, a change of "mental sets" for some educators may be necessary to expedite this preparation process for the students. It is evident that this change is necessary when statistics such as 2.5 million U. S. students

drop out of school per year, many disenchanted with the educational system for being irrelevant or mundane.

Yet it is crucial that Career Education specialists not present themselves as "do gooders"with a "wonder program." This is a delicate area because inherent in asking for educational change is the inference that the previous method is lacking or inferior. This negative reaction caused by the "savior of education" attitude must be carefully avoided. It must be presented that educators address themselves to the current problems of students and that the life preparation aspect of Career Education makes sense.

Another problem area that Mr. Staber mentioned is a breakdown during the "spin off" period when workshop participants transmit their knowledge to those who have not attended. The breakdown occurs when not all teachers are briefed equally thoroughly and not all teachers are equally receptive to new information. This faulty multiplier approach could be corrected by the incorporation of Career Education into faculty meetings, in-service days, and other gatherings in which all of the teachers participate.

The director also wanted to respond to the charges of those who state that Career Education is being overemphasized. He feels that this may be a verbal excuse on the part of some educators who may be threatened by the new program or who have no desire to expend the energy to meet the new challenge of Career Education.

Generally, Richard Staber said, he was satisfied with the growth and progress of the program, especially in regard to the money and personnel involved. He commented that the majority of Central Columbia School District teachers and administrators address themselves to the problems of education and have incorporated some phases of Career Education in their daily classroom experiences. Although he would like to see an immediate overall change in education centered around Career Education, when he assessed the program realistically, the three year progress was heartening.

Finally, education must provide students with salable skills and life adjustment skills with which to enter the "real world." Each student should be able to pursue his individual choice of Career Education courses without being seriously shortchanged by an insufficient curriculum. Upon graduation, each high school senior is handed a diploma, which is a symbolic documentation of the completion of his initial preparatory life phase. We, as educators, must be responsible for the accountability and reliability of this symbol as a true yardstick of real world readiness.

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

1. Career Education can be infused into a comprehensive public school system. Refocus and modification of instruction efforts, as are necessary for Career Education, require acceptance of change.

2. The Board of Education, administrative staff, and faculty accept and support the Career Education concept. Even after a three year effort, we still recognize that additional work is required to expand the program to an all encompassing Career Education effort with all educators actively involved.

3. A most important aspect of Career Education involvement is cross grade discipline communication. Coordination or lack of it can spell success or failure. Treatment of the Occupational Cluster activities requires substantial organization to eliminate ineffective redundancy. Even after the completion of the teacher workshop on Career Education coordination and the development of the organizational guide (Appendix B), additional in-servicing is necessary.

4. Resource personnel has become an integral part of the ongoing process associated with the Career Education thrust. The Central Susquehanna Intermediate Unit, the Pennsylvania Department of Education's Research Coordinating Unit and Pupil Personnel divisions, and the Pennsylvania State University Counselor Education Division are examples of outside agencies capable of providing such services.

5. Eighty-four percent of the Central Columbia High School students are enrolled in one or more vocational courses leading to salable skills.

6. More Central Columbia High School students got their first job after high school through the school co-op program than any other method.

7. Career Education delivery systems can be developed within the comprehensive high school setting to provide students with occupational training and also provide them with opportunities to test the theories of the classroom against the realities of the world of work. It is obvious that some occupational clusters are being well developed while others have yet to be integrated into the curriculum.

8. Flexibility and freedom of movement from the classroom setting to the world of work community are essential ingredients of a successful Career Education program. Field trips, guest speakers, individual career observation programs, and work study programs enhance learning experiences and demonstrate relationships between today's learning and tomorrow's application.

RECOMMENDATIONS

1. Career Education projects should not be measured in time increments, rather they should be fluent ongoing processes beginning at the preschool level and continuing until high school graduation.

2. For Career Education programs to attain the continuous flow desired, they must have the full cooperation and support of administrators, teachers and counselors at all levels of development.

3. A Career Education coordinator position would add considerably to project effectiveness. Duties and responsibilities should include in-service teacher training, curriculum refocus, and community acceptance and involvement.

4. Supportive resource personnel is essential to successful growth, review and restructure of Career Education programs.

5. All students should be urged to participate in Career Education programs. College bound as well as work bound students should be exposed to the world of work.

6. Part of a Career Education program's success can be measured by the number of students being placed in positions relating to their previous education. Yet, these numbers should be downplayed. All students should be exposed to some type of work study program. The success factor of students remaining in their area of study after graduation may decrease with the increase of students becoming involved in work study, but this exposure of all students to some type of work experience offsets the possible decrease in the work study placement factor.

7. The curriculum delivery system should revolve around the fifteen occupational clusters. Each cluster deserves an equal propertionate expenditure. Students' career choices should not be effected by the inadequances of existing school curriculums.

8. The Pennsylvavia Department of Education's secretary, John C. Pittinger's recommendations concerning "Learning Outside the classroom" couldn't be more timely. He concurs with our recommendation that a reciprocal agreement between the educational institutions and the community institutions is essential if our students are going to be served to the maximum extent by Career Education programs.

APPENDIX SECTION

APPENDIX A

APPENDIX A

CENTRAL COLUMBIA HIGH SCHOOL
4777 Old Berwick Road
Bloomsburg, Pennsylvania 17815

SUBJECT NUMBERS AND TITLES - 1974-1975

LANGUAGE ARTS:

101	Classic Am.Novel	(1)	10-12
102	Bus. Eng.	(1)	10-12
103	Comp. I	(1)	10-12
104 *	Comp. II	(1)	10-12
105	Cont. Lit.	(1)	10-12
110	Journ.	(1)	10-12
111	Journ. Lab.	(1)	10-12
112	Old Test. Lit.	(1)	9-12
113	Myth. & Folklore	(1)	9-12
114	9th Gr.Eng.& Comp.	(2)	9
115	Mass Media	(1)	10-12
116	P.C.E.T.	(1)	10
117	Short Story	(1)	10-12
118	Speech I	(1)	9-12
119 *	Speech II	(1)	10-12
120	Theatre Arts I	(1)	9-12
123	World Novel	(1)	10-12
127	Det. & Mys. Stories	(1)	10-12
129	Creative Writing	(1)	10-12
130	Black Lit.	(1)	10-12
131 *	P.C.E.T. II	(1)	11-12
132	Shakespeare	(1)	10-12
133	Voc. Eng.	(1)	10-12
134 *	Grammar II	(1)	10-12
135	Humorous Lit.	(1)	9-12
147	Ind. Study in Classics	(1)	12
148	Ind. Study L.A.	(1)	12
149	Lib. Sci. I & II	(2)	10-12

SOCIAL STUDIES:

151	Am. Cultures	(2)	9
152	World Cultures	(2)	10
153	Economics	(1)	10-12
154	Sociology	(1)	11-12
155	Pol. Sci.	(1)	11-12
156	Anthropology	(1)	10-12
157	Cont. Am. Hist.	(1)	10-12
160	Crit. Wd. Issues	(1)	10-12
161	World Geog. I	(1)	10-12
162	Intro. to Psychology	(1)	10-12
163	Hist. of Soviet Union	(1)	10-12
165	Intro. to Philosophy	(1)	11-12
166	Am. Legal System	(1)	10-12
167	World Geog. II	(1)	10-12
168	Mod. European Hist.	(1)	10-12

MATHEMATICS:

201	Algebra I	(2)	8-12
202 *	Algebra II	(2)	9-10
203 *	Algebra III	(1)	10-12
204 *	Calculus	(2)	12
205	Intro. Algebra	(2)	9-12
206	Consumer Math I	(1)	11-12
207	Freshman Math	(2)	9
208 *	Elem. Functions	(1)	11-12
209	Fund. of Math	(1)	10-11
210 *	Geometry	(2)	10-12
212 *	P.C.E.T. - M	(1)	11
213 *	Trigonometry	(1)	11-12
214 *	Intro. Prob.&Stat.	(1)	11-12
217	Industrial Math	(1)	10-11
218	Con. Math II	(1)	11-12
219 *	Adv. Geometry	(1)	11-12

SCIENCE:

251	Phys. Sci. I	(2)	9
252	Biology I	(2)	10
254 *	Biology II	(2)	11-12
256	Chem.& Chem. Lab.	(2)	11-12
258 *	Qual. Analysis	(1)	12
259	Intro. to Astronomy	(1)	12
260 *	Physics	(2)	12
262 *	Physical Sci. II	(1)	10-12
263 *	Nuclear Sci.	(1)	11-12
265	Gem. Elec.	(1)	9-12

BUSINESS:

301	Con. Ed.	(1)	10-12
302	Bus.Cor. & Fund.	(2)	9-11
303	Bus. Law	(1)	10-12
304	Elem. Acct.	(1)	10-12
305 *	Inter. Acct.	(1)	11-12
306 *	Adv. Acct.	(1)	11-12
307	Bus. Math	(1)	10-12
309	Marketing I	(2)	11
310 *	Marketing II	(2)	12
311	Shtd. Principles	(1)	10
312 *	Intro. to Dict.	(1)	10
313 *	Intro. to Trans.	(1)	11
314 *	Speed Dict. & Trans.	(1)	11
315 *	Adv.Sp.Dict. & Trans.	(1)	12
316 *	Sim. Prod. Shtd.	(1)	12
317	Beg. Typing	(1)	9-12
318 *	Inter. Typing	(1)	9-12
319 *	Adv. Typing	(1)	10-12
320 *	Empl.Prep. Typing	(1)	11-12
321 *	Office Proc.	(1)	11-12
322 *	Bus. Mach.	(1)	11-12
324 *	Intro.Data. Proc.	(1)	11-12
325 *	Applied Acct.	(1)	12
327	Med. Sec.	(1)	11-12

ART:

353	Ceramics I	(1)	9-12
354 *	Ceramics II	(1)	9-12
355	Drawing I	(1)	9-12
356 *	Painting	(1)	9-12
357	Crafts	(1)	9-12
358 *	Drawing II	(1)	9-12

MUSIC:

401	Band	(2)	9-12
402	Chorus	(2)	9-12
404	Mus. Appreciation	(2)	9-12
406	Music Theory	(2)	9-12

FOREIGN LANGUAGE:

451	French I	(2)	9-12
452 *	French II	(2)	10-12
453 *	French III	(2)	11-12
454 *	Dir. French Readings	(2)	10-12
456	German I	(2)	9-12
457 *	German II	(2)	10-12
458 *	German III	(2)	11-12
460 *	Red. Sel. German	(1)	12
461	Spanish I	(2)	9-12
462 *	Spanish II	(2)	10-12
463 *	Adv. Conver.Span.	(2)	11-12
464 *	Spanish Readings	(2)	11-12

HOME ECONOMICS:

501	Bas. Cloth.Cons.	(1)	9-12
502 *	Tailoring	(1)	11-12
505	Bas. Foods	(1)	9-12
506 *	Foods/Sp.Occ.	(1)	10-12
509	Family Health	(1)	10-12
510	Home Furn.	(1)	9-12
512	Child Care	(1)	11-12
513	Sch. Service	(1)	9-12
514	Family Crafts	(1)	9-12
517	Fam.Fin.& Mgmt.	(1)	10-12

INDUSTRIAL ARTS:

551	Bas. Art Mat.	(1)	9-12
559	Plas. Tech. I	(1)	9-12
560 *	Plas. Tech. II	(1)	9-12
561	Bas. Woodwkg.	(1)	9-12
562 *	Adv. Woodwkg.	(1)	9-12
563	Cab. I	(1)	10-12
564 *	Cab. II	(1)	10-12
571	Leathercraft	(1)	9-12
601	In. Grap.Comm.	(1)	9-12
602 *	Graph. Com. II	(1)	9-12
603 *	Graph.Com. Mach.	(1)	10-12
604 *	Graph.Com.Elec.	(1)	10-12
605 *	Arch. Dr.	(1)	10-12
606 *	Struc.Dr.Indus.	(1)	10-12
607 *	Indus.Prod.Ill.	(1)	10-12
608 *	Bas. Weld. Dr.	(1)	10-12
609 *	Sur.Dev.Ind.St.	(1)	10-12
610 *	Area Sp.Dr. Ind.	(1)	10-12
611 *	Map.Dr. Ind. St.	(1)	10-12

AGRI BUSINESS:

650	Ag. Bas. Shop	(2)	9-12
651	FFA	(1)	9-12
652	Small Engine	(2)	9-12
653	Ag. Weld.	(2)	9-12
654	Animal Sci.	(2)	9-12
655	Struct. & Ut.	(1)	9-12
656	Ag. Mech.	(2)	9-12
657	Ag. Elec.	(1)	9-12
666	Sw. Sta. Train.	(1)	11-12
672	Ag. Work Exp.	(3)	9-12
673	Indep. Study	(0)	9-12
674	Welding	(1)	9-12

HEALTH & PHYSICAL EDUCATION:

701	Health	(1)	9-12
706	Adapt. PE	(2)	9-12
710	Driver Ed.	(2)	10-12
715	Safety Ed.	(2)	10
720	Co.Work Exp.AM	(2)	12
721	Co.Work Exp.PM	(2)	12
722	Co.Work Exp.AM/PM	(2)	12
730	Adv. Col. Place.	(2)	12
731	Boys Phys.Ed.	(2)	9-12
732	Boys Phys. Ed.	(2)	9-12
733	Boys Phys. Ed.	(2)	9-12
734	Girls Phys.Ed.	(2)	9-12
735	Girls Phys.Ed.	(2)	9-12
736	Girls Phys.Ed.	(2)	9-12

* Prerequisite (s) required

KEY:

Subject Number	Subject Title	Course Length-Semester	Grades Offered To
101	Classic Am. Novel	(1)	10-12

Rev. 8/1/74

APPENDIX B

CAREER EDUCATION NEEDS THROUGH RELEVANCE AND LOGIC

AN INTERGRADE INTERDISCIPLINARY ORGANIZATIONAL PLAN

DEDICATION

G. William Creasy
1932 - 1973

This booklet is dedicated to the late G. William Creasy, who during his twelve years as an educator at Central Columbia developed our job experience program, initiated our distributive education program, acquired for the district state and federal funds for student-oriented programs, and made countless other tangible advances.

But his greatest gift to all of us was not a program, a course, or an organization. Indeed, what he so willingly offered us was love, genuine concern, undying loyalty, and incredible dedication to education.

No eulogy, plaque, scholarship, or booklet dedication can ever adequately display the gratitude we feel toward Bill Creasy.

C areer

E ducation

N eeds

T hrough

R elevance

A nd

L ogic

AN INTERGRADE INTERDISCIPLINARY ORGANIZATIONAL PLAN

developed by

TEACHERS COUNSELORS ADMINISTRATORS

from the

CENTRAL COLUMBIA SCHOOL DISTRICT
4777 OLD BERWICK ROAD
BLOOMSBURG, PENNSYLVANIA 17815

CENTRAL COLUMBIA SCHOOL DISTRICT

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Superintendent-Elect

Mr. Horace B. Reynolds

Elementary School Principal

Mr. John J. Yastishock

Middle School Principal

Mr. Robert Thomas

High School Principal

Mr. Hervey Thomas

Administrative Assistant

Dr. Frank Scarpino

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INTRODUCTION

The Career Education program has been part of the curriculum at Central Columbia School District for the past three years. Hence when the third workshop met in July, 1973, its major concern was not how Career Education can be infused into classroom activity, but rather how teachers could band together to make a coordinated effort at Career Education. In the constant self-evaluation efforts of our project here at Central, an organized, comprehensive program for the kindergarten through twelfth grade emerged as our primary need; the workshop was aimed at fulfilling this need.

The program has been based on the United States Office of Education (USOE) Career Education model of Awareness (kindergarten-4), Exploration (5-8), and Preparation (9-12). The fifteen occupational clusters incorporated into the USOE Career Education model have also been adopted at Central Columbia School District in an effort to curb the inefficiency and redundancy of using several competing job classification systems concurrently. With the adoption of this system, it is the task of our program workers at Central to create a framework of organization so that some clusters are not overly stressed to the total neglect of other clusters. What the program needs is the prevention of "overlap and gap." For example, the program must avoid having students study the transportation cluster for four years to the exclusion of all others and then graduate never having studied other clusters such as communications or environment.

Therefore, this publication is presented as an effort to provide some guidelines as to how a coordinated and comprehensive program might be achieved. We at Central Columbia solicit both questions and contributions offered by concerned colleagues.

This project was federally funded in accordance with the Exemplary, Part D Section of the Vocational Education Amendments of 1968, Public Law 90-576.

CENTRAL COLUMBIA SCHOOL DISTRICT
4777 Old Berwick Road
Bloomsburg, Pennsylvania 17815

Career Education Workshop-Summer 1973

Participant Roster

NAME	LEVEL	DEPARTMENT
Rishe, Donald N.	Superintendent	Administration
Thomas, Hervey	High School Principal	Administration
Thomas, Robert	Middle School Principal	Administration
Yastishock, John	Elementary School Principal	Administration
Zalonis, Adolph	High School Counselor	Guidance
Gass, Clyde	Middle School Counselor	Guidance
Staber, Richard	High School Counselor	Guidance
Krum, Shirley	First Grade Teacher	Comprehensive
Harrison, Sarah	Second Grade Teacher	Comprehensive
Furman, Paulette	Third Grade Teacher	Comprehensive
Boston, Ronald	Fourth Grade Teacher	Comprehensive
Eisenhauer, Stephen	Middle School Teacher	Science
Norquest, Kay	Middle School Teacher	Social Studies
Laubach, Edward	Middle School Teacher	Science
Shotwell, Olin	Middle School Teacher	Science
Shutt, James	High School Teacher	Distributive Education
John, Harry	High School Teacher	Business Education
Everett, Carl	High School Teacher	Vocational Agriculture
Engle, Donald	High School Teacher	Social Studies
Scarpino, Frank	High School Teacher	Science

CENTRAL COLUMBIA SCHOOL DISTRICT
PHILOSOPHY OF EDUCATION

We believe:

Education is a lifelong process which involves intellectual, emotional, moral, and physical growth accompanied by adjustments to circumstances and people.

We believe:

1. That we need to make provisions for all children to participate in the educational process as individuals and as members of groups in order:
   a. to have a sense of belonging and self-esteem, accompanied by feelings of accomplishment.
   b. to grow in critical and creative powers.
   c. to anticipate or perceive potential problems.
   d. to solve existing problems logically--evaluate, plan, decide, act, interpret, re-evaluate processes.
   e. to achieve concern, respect, and fulfill commitments to one's self and to others.
   f. to seek and accept responsibility.
   g. to develop an appreciation for esthetics.
   h. to develop healthy attitudes toward work and society.
2. That we have a major responsibility to encourage positive attitudes and habits which are conductive to good physical and mental health.

We believe:

It is the responsibility of the staff to recognize and encourage individual differences among students and to help each student to channel his own abilities, aptitudes, and resources into those educational and vocational activities which offer him the best chance of self-fulfillment within the realm of the community of man.

It is the responsibility of the school to offer the students maximum opportunities to develop flexibility and adaptability which will aid in adjustments to future life situations--be they in the realm of civic responsibility, family life, work, and leisure activity.

We believe:

That mastery of learning skills and acquirement of knowledge is an important activity of all students, and that all students should be encouraged to further develop their interests and aptitudes through involvement in such activities as dramatics, student government, intramural and interscholastic athletics, social functions, community and school projects, music programs, assembly programs, and school publications, all of which provide leadership training and growth opportunities in addition to those found in regular class programs.

We believe:

That career awareness, career exploration, and developing a salable skill is essential to becoming a healthy member in a free society.

Finally, we believe:

That the success of our educational program depends upon the mutual cooperation and support of the citizens of the community, the Board of Education, the administration, the professional and non-professional staff, and the students themselves.

ACKNOWLEDGEMENTS

We are deeply indebted to the following resource people who made commendable contribution to the second Central Columbia Career Education Workshop. We sincerely thank them for the "above the call" time and effort extended on our behalf.

Dr. William Williams	College of Agriculture Pennsylvania State University
Mr. John Rebert	Vocational Guidance Division Pennsylvania Dept. of Education
Dr. Carroll A. Curtis	Research Coordination Unit Pennsylvania Dept. of Education
Dr. Clarence Dittenhafer	Research Coordinating Unit Pennsylvania Dept. of Education
Mrs. Marie Clark	Career Education Bureau Central Susquehanna Intermediate Unit
Mrs. Kathleen Gearhart	Career Education Bureau Central Susquehanna Intermediate Unit
Dr. Carl Pepperman	Career Education Bureau Central Susquehanna Intermediate Unit
Mrs. Patricia Shapiro	Bureau of Labor Statistics United States Department of Labor

ELEMENTARY FACULTY

Career Education Position Paper

The elementary faculty, grades K through 4 of the Central Columbia School District, is cognizant that youth must develop through specific stages in education as well as in life. It accepts that each individual must, in a progressive personal development, make critical decisions which will have lasting impact upon his life. It accepts that modern elementary education assumes responsibilities that go far beyond the traditional 3 R's and that among these are preparations in moral, social, and economic concepts.

It further accepts that if any child is to be served optimally by the Central Columbia School District, then it must require a unified effort, not only among the various individual grades and buildings, from the day a child enters kindergarten, through the time when the high school doors close behind him and he is a young adult taking his place of responsibility in the local or world community.

In accepting and supporting this philosophy; the elementary faculty recognizes that career education is not a separate entity in itself to be dealt with by guidance counselors only, or only by teachers of sophmore, junior, and senior classes, nor is it a separate curriculum, but rather that it can be a part of almost every educational experiences at every grade level and subject in a child's school life.

The elementary faculty accepts especially its responsibility to develop career awareness so that a progression of awareness and exploration can proceed pyramidically throughout the middle and high school years.

It is therefore the objective of the elementary faculty to infuse the regular elementary curriculum with those career developmental experiences which will result in a growing concept of the work ethic as well as an awareness of certain specific occupations and the various career clusters as defined by the United States Health, Education and Welfare Department.

CENTRAL COLUMBIA ELEMENTARY SCHOOL INFUSION EFFORTS

It is an ongoing problem of educators that there are constant and conflicting pressures from varied sources to add to the curriculum, yet there is seldom a request for a deletion from the curriculum. Thus educators are overloaded with a barrage of course advocators, their sole purpose being to get their course suggestion into the curriculum. With the recognition of this problem, we realize what it means to ask educators to attempt to include Career Education into the curriculum also. Stemming from this problem came the idea of "infusion efforts."

By "infusion efforts" we mean that Career Education can be interjected into the existing curriculum. It becomes the task of teachers to decide what relates to Career Education in the existing courses that they teach, then "infuse" the career education material into their subject area. The initial investment is increased teacher emphasis on Career Education in their courses, not increased time in the curriculum.

At the elementary school level opportunities for infusion are plentiful. Contained within this publication are examples in social science, health, and science, which are presented for each grade level beginning on page four. The examples are all in conjunction with the Laidlaw Series text books and they are classified according to career, suggested experience, and career cluster (United States Office of Education). These categories are listed according to their unit numbers, unit titles, and pages.

We are working toward three major objectives at the elementary school level. The first objective is career awareness. For example, when students study community and home in social studies, the career-minded educator can stress job possibilities for the mother and father. Even at this level, educators must fight the career limiting job stereotypes of the "mother jobs" versus the "father jobs." This is the time in the students' lives for them to be allowed to familiarize themselves with as many job types as possible.

The second objective is to build a respect for work within the students. It must be taught that every job has dignity. Even menial tasks must be performed, and students must develop an appreciation for the workings of our intricate system of labor division. Because of the division of labor, we are all interdependent on each other in regard to the world of work. Through Career Education the elementary students must be encouraged to realize how they as individuals "fit in." Obviously, students who develop good career attitudes have a distinct advantage over other students once they enter the world of work, since attitudes inevitably influence performance.

Finally, the need for good work habits must be emphasized. Good work habits such as completing each job started, neatness, promptness, and accuracy can be explained to the elementary school student.

Many of these suggestions already exist in some form in the elementary curriculum. It is through the infusion efforts that fragmentary reference to jobs in courses of study can be coordinated into a comprehensive Career Education program stressing career awareness, respect for work and good work habits.

CAREER EDUCATION

Grade One

July 27, 1973

Miss Shirley A. Krum

Suggested Experiences

I. Incidental Discussion

A. Work habits
B. Work ethics
C. General career areas
D. Specific career areas

II. Project or Field Experience

A. Posters
B. 3-dimensional creations or models
C. Field trips
D. Outside resource person
E. Articles from magazines and newspapers
F. Role playing
G. Observation
H. Storytelling
I. Creative writing
J. Experience charts
K. Classroom newspaper
L. Puzzles and educational games
M. Visual aids
N. Commercial advertisements

III. Actual units of study (mini-units)

SOCIAL STUDIES

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 1	People and Homes	pp. 4-25
Housewife	Possible field exp.	Consumer and Homemaking
Realtor	Incidental Discussion	Marketing and Distribution
Landlord	Incidental Discussion	Personal Service
Movers	Incidental Discussion	Transportation
Contractor	Possible field exp.	Construction
Carpenter	Incidental Discussion	Construction
Mason	Incidental Discussion	Construction
Plumber	Incidental Discussion	Construction
Electrician	Incidental Discussion	Construction
Painter	Incidental Discussion	Construction
Trailer Bldr.	Incidental Discussion	Manufacturing
Landscaper	Incidental Discussion	Agri-Bus.; Nat. Resources
Road Bldr.	Incidental Discussion	Construction
Bus Driver	Incidental Discussion	Transportation
Taxi Driver	Incidental Discussion	Transportation
Carpet Mfr.	Incidental Discussion	Manufacturing
Furniture Mfr.	Incidental Discussion	Manufacturing

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 2	Work and Play	pp. 26-47
Contractor	Possible field exp.	Construction
Bank personnel	Incidental Discussion	Business and Office
Farmer	Possible field exp.	Agri-Bus; Nat. Resources
Dairy Farmer	Incidental Discussion	Agri-Bus; Nat. Resources
Fruit Prod.	Incidental Discussion	Agri-Bus; Nat. Resources
Rancher	Incidental Discussion	Agri-Bus; Nat. Resources
Lumber jobs	Incidental Discussion	Agri-Bus; Nat. Resources
News Reporter	Incidental Discussion	Communication and Media
Printer	Incidental Discussion	Communication and Media
Weather Reporter	Incidental Discussion	Communication and Media
Cartoonist	Incidental Discussion	Communication and Media
Photographer	Possible field exp.	Communication and Media
Television pers.	Incidental Discussion	Communication and Media
Radio personnel	Incidental Discussion	Communication and Media
Policeman	Possible mini-unit	Public Service
Fireman	Possible mini-unit	Public Service
Postman	Possible mini-unit	Public Service
Druggist	Incidental Discussion	Health
Seamstress	Incidental Discussion	Consumer-Homemaking
Draftsman	Incidental Discussion	Construction
Auto mechanic	Incidental Discussion	Public Service
Gas Stn. Attendant	Incidental Discussion	Public Service
Chemist	Possible field exp.	Health
Teacher	Possible field exp.	Public Service
Teacher's Aide	Possible field exp.	Public Service
Janitor	Possible field exp.	Public Service
Principal	Possible field exp.	Public Service
Cook	Possible field exp.	Consumer-Homemaking
Telephone Opr.	Incidental Discussion	Communication and Media
Receptionist	Incidental Discussion	Business and Office
Secretary	Possible field exp.	Business and Office
Store personnel	Possible field exp.	Marketing and Distribution
Garbage Coll.	Incidental Discussion	Public Service
Truck driver	Incidental Discussion	Transportation
Life Guard	Incidental Discussion	Hospitality and Recreation
Zoo Personnel	Incidental Discussion	Hospitality and Recreation
Musician	Possible field exp.	Fine Arts and Humanities
Actors-Actresses	Incidental Discussion	Fine Arts and Humanities
Librarian	Possible field exp.	Public Service
Theater personnel	Incidental Exp.	Communication and Media
Milkman	Possible mini-unit	Public Service
Baker	Possible mini-unit	Public Service
Clthing Mfr.	Incidental Experience	Manufacturing

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 3	Globes and Maps	pp. 48-65
Cartographer	Incidental Discussion	Public Service
Astronauts	Possible field exp.	Transportation

Unit 4	People in West Africa	pp. 66-83
Pilot	Incidental Discussion	Transportation
Stewardess	Incidental Discussion	Transportation
Ship personnel	Incidental Discussion	Transportation
Bus driver	Incidental Discussion	Transportation
Train Engineer	Incidental Discussion	Transportation

This unit can be used to compare careers in our country with careers in West Africa.

Unit 5	Our Country	pp. 84-95
President	Incidental Discussion	Public Service
Vice President	Incidental Discussion	Public Service
Law Makers	Incidental Discussion	Public Service
Historians	Incidental Discussion	Fine Arts and Humanities

HEALTH

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 1	You and Your Friend	pp. 6-19
Work Ethics	Incidental Discussion	

Unit 2	The Safe Way For You	pp. 20-35
School bus dr.	Possible field exp.	Transportation
Fireman	Incidental Discussion	Public Service

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 3	The Way You Look	pp. 36-49
Barber	Possible field exp.	Personal Service
Beautician	Incidental Discussion	Personal Service
Phys. Ed. Instr.	Possible field exp.	Public Service
Unit 4	The Food You Eat	pp. 50-65
Cook	Possible field exp.	Consumer and Homemaking
Cafeteteria Aide	Possible field exp.	Consumer and Homemaking
Unit 5	How You Grow	pp. 66-79
School Nurse	Possible field exp.	Health
Ophthalmologist	Incidental Experience	Health
Dental Hygenist	Possible field exp.	Health
Dentist	Possible field exp.	Health
Athletes	Possible field exp.	Hospitality and Rec.
Unit 6	You and Your Family	pp. 80-93

SCIENCE

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 1	What is Science?	pp. 6-13
Scientist	Incidental Discussion	Environment
Unit 2	Animals and Plants	pp. 14-37
Forester	Possible field exp.	Environment
Florist	Possible field exp.	Agri-Bus; Nat. Resources
Nurseryman	Possible field exp.	Agri-Bus; Nat. Resources
Unit 3	The Earth	pp. 38-77
Geologist	Possible field exp.	Agri-Bus; Nat. Resources
Oceanographer	Incidental Discussion	Agri-Bus; Nat. Resources
Aerographer	Incidental Discussion	Environment
Unit 4	The Universe	pp. 78-99
Astronomer	Possible field exp.	Environment
Planetarium Pers.	Possible field exp.	Communication and Media
Unit 5	Matter and Energy	pp. 100-125
Unit 6	The Human Body	pp. 126-141

CAREER CLUSTERS COVERED

1. Consumer and Homemaking
2. Marketing and Distribution
3. Transportation
4. Construction
5. Manufacturing
6. Agri-Business and Natural Resources
7. Business and Office
8. Communication and Media
9. Public Service
10. Health
11. Hospitality and Recreation
12. Fine Arts and Humanities
13. Personal Service
14. Environment

NOT COVERED

1. Marine Science

CAREER EDUCATION

Grade Two

Miss Sarah Jane Harrison

Suggested Career Development Experience

I. Incidental or Planned Discussion

A. Work habits
B. Work ethic
C. General job areas
D. Specific job areas

II. Project or Field Experience Stage

A. Posters
B. 3-dimensional creations or models
C. Field trips
D. Outside visitors (resources)
E. Articles from magazines and newspapers
F. Role-playing
G. Storytelling
H. Creative writing
I. Observation
J. Experience charts
K. Puzzles and games
L. Visual aids-films, filmstrips
M. Manufacturing advertisements

III. Actual indepth units of study (mini-units) 3-5 days

SOCIAL SCIENCE

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 1	Families In Our Country	pp. 4-20
Housewife	Discussion	Consumer and Homemaking
Farmer	Proj. or field exp.	Agri-Bus; Nat. Resources
Cook	Observation and disc.	Consumer and Homemaking
Grocer and related	Project or field exp.	Marketing and Dist.
Postman	Project or field exp.	Public Service
Librarian	Observation and disc.	Public Service
Pharmacist	Discussion	Health
Policeman	Observation and disc.	Public Service
Book publisher	Discussion	Communication and Media
Television pers.	Discussion	Communication and Media
Train personnel	Project or field exp.	Transportation
Bank personnel	Observation and disc.	Business and Office
Truck driver	Discussion	Transportation
Car Mfr.	Project or field exp.	Manufacturing
Sales Clerks	Observation and disc.	Marketing and Dist.
Seamstress	Discussion	Manufacturing
Forest-park rgr.	Discussion	Environment

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 2	Where Families Live	pp. 20-36
Movers	Discussion	Transportation
Electrician	Discussion	Construction
Lumberers	Discussion	Agri-Bus; Nat. Resources
Plasterers	Discussion	Construction
Architect	Discussion	Construction
Plumber	Discussion	Construction
Cement worker	Discussion	Construction
Mobile home mfr.	Proj. or field exp.	Manufacturing
Lnadscape	Observation and disc.	Environment
Painter	Observation and disc.	Construction
Interior dec.	Discussion	Construction
Unit 3	Maps and Globes	pp. 36-52
Cartographer	Discussion	Public Service
Navigator	Discussion	Transportation
Weather predictor	Observation and disc.	Communication and Media
Newsmen	Project or field exp.	Communication and Media
Unit 4	Families in Other Lands	pp. 52-74
Ski-instructor	Discussion	Hospitality and Rec.
Technician	Discussion	Communication and Media
Opthamologist	Discussion	Health
Jeweler	Observation and disc.	Marketing and Dist.
Unit 5	Houses in Other Lands	pp. 74-92
	Compare construction techniques as in unit 2	

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 6	Schools in our Country	pp.93-106
Teachers	Observation and disc.	Public Service
Principal	Observation and disc.	Public Service
Secretary	Observation and disc.	Business and Office
Teacher aide	Observation and disc.	Public Service
Authors	Project and field exp.	Fine Arts and Humanities
Papermaker	Discussion	Manufacturing
School nurse	Visitor-observ.-disc.	Health and Pub. Ser.
School bus dr.	Observation and disc.	Public Serv.; Trans.
Custodian	Observation and disc.	Public Service
Musician	Project or field exp.	Fine Arts and Humanities
Artist	Project or field exp.	Fine Arts and Humanities
Unit 7	Schools in Other Lands	pp. 107-125
	Compare with U.S. occupations above	
Unit 8	Our Country	pp. 126-139
Shipping by sea	Discussion	Transportation
President	Discussion	Public Service
Legislators	Discussion	Public Service

HEALTH

Unit 1	Many Friends	pp. 6-21
Postman	Observation and disc.	Public Service
Doctor	Discussion	Health
Nurse	Discussion	Health
Dentist	Discussion	Health
Dental Hygenist	Discussion	Health
Receptionist	Discussion	Business and Office
Playground inst.	Discussion	Hospitality and Rec.

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 2	How to be Safe	pp. 22-37
Policeman	Observation and disc.	Public Service
Bus Driver	Observation and disc.	Transportation
Fireman	Project or field exp.	Public Service
Unit 3	How to Stay Well	pp. 38-53
Scientist	Discussion	Health
Dietician	Discussion	Health
Eye Doctor	Discussion	Health
Unit 4	How to Look Your Best	pp. 54-69
Beautician	Project or field exp.	Personal Service
Barber	Discussion	Personal Service
Unit 5	What to Eat	pp. 55-85
Farmer	Project or field exp.	Agri-bus; Nat. Res.
Food packers	Project or field exp.	Manufacturing
Dairymen	Discussion	Agri-bus; Nat. Res.
Fruit growers	Discussion	Agri-bus; Nat. Res.
Unit 6	The Way You Grow	pp. 86-101
Unit 7	Your Family	pp. 102-117
Housewife	Observation and disc.	Consumer and Homemaking
Baker	Discussion	Marketing and Dist.

SCIENCE

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 1	What is Science?	pp. 6-13
Botanist	Discussion	Agri-Bus; Nat. Res.
Florist	Project or field exp.	Agri-Bus; Nat. Res.
Tree Doctor	Discussion	Agri-Bus; Nat. Res.
Lifeguard	Discussion	Hospitality and rec.
Biologist	Discussion	Agri-Bus; Nat. Res.
Archaeologist	Discussion	Agri-Bus; Nat. Res.
Zoo keeper	Project or field exp.	Agri-Bus; Nat. Res.
Unit 2	Animals and Plants	pp. 16-64
Horticulturist	Discussion	Agri-Bus; Nat. Res.
Farmer	Project or field exp.	Agri-Bus; Nat. Res.
Oceanographer	Discussion	Marine Science
Zoologist	Discussion	Agri-Bus; Nat. Res.
Game comm.	Discussion	Agri-Bus; Nat. Res.
Unit 3	The Earth	pp. 65-102
Airplane pilot	Discussion	Transportation
Geologist	Discussion	Agri-Bus; Nat. Res.
Astronaut	Discussion	Transportation
Astronomer	Discussion	Communications and Media
Circus people	Observation and disc.	Hospitality and Rec.
Navigator	Discussion	Transportation
Shipbuilder	Discussion	Construction
Unit 4	The Universe	pp. 103-136
	same as unit 3	

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 5	Matter and Energy	pp. 136-166
Baker-pizza shop	Discussion	Public Service
Photographer	Discussion	Comm. and Media
Electrical eng.	Discussion	Comm. and Media

Unit 6	The Human Body	pp. 166-169
Nurse	Visitor-observation discussion	Health

CAREER EDUCATION

Grade Three

Paulette Furman

CAREER CLUSTERS

1. Agri-Business and Natural Resources
2. Business and Office
3. Communications and Media
4. Construction
5. Consumer and Homemaking
6. Environment
7. Fine Arts and Humanities
8. Health
9. Hospitality and Recreation
10. Manufacturing
11. Marine Science
12. Marketing and Distribution
13. Personal Service
14. Public Service
15. Transportation

Suggested Experience

I. Incidental discussion

A. Work habits
B. Work ethics
C. General career areas
D. Specific career areas

II. Projects or field experience

A. Poster
B. 3-dimensional creations or models
C. Field trips
D. Outside visitor
E. Articles from magazines and newspapers
F. Role playing
G. Observation
H. Storytelling
I. Creative writing
J. Experience charts
K. Classroom newspaper
L. Puzzles and games
M. Visual aids
N. Manufacturing advertisements

III. Actual units of study

A. (mini-units) 3 to 5 days

SOCIAL STUDIES

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 2	Communities	pp. 5-27
Part 1,2		
Secretary	Role playing	Business and Office
Fisherman	Pictures	Marine Science
Policeman	Discussion	Public Service
Fireman	Discussion	Public Service
Fruit picker	Pictures	Agri-Bus; Nat. Res.
Truck driver	Outside visitor	Marketing and Dist.
Part 3-Long Ago		
Storekeeper	Discussion	Marketing and Dist.
Blacksmith	Discussion	Agri-Bus; Nat. Res.
Dock workers	Pictures and disc.	Public Service
Stagecoach dr.	Role playing	Public Service
Steamship cap.	Discussion	Public Service

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 2	Kinds of Communities	pp. 29-51
Part 1-Farm		
Poultry farmer	Field trip	Agri-Bus; Nat. Res.
Dairymen	Outside visitor	Agri-Bus; Nat. Res.
Cotton farmer	Pictures	Agri-Bus; Nat. Res.
Fruit farmer	Field trip	Agri-Bus; Nat. Res.
Truck farmer	Discussion	Agri-Bus; Nat. Res.
Beef farmer	Observation	Agri-Bus; Nat. Res.
School bus dr.	Observation	Public Service
Telephone rep.	Pictures	Public Service
Part 2-Towns and Small Cities		
Factory pers.	Discussion	Manufacturing
City bus dr.	Pictures	Public Service
Fire station disp.	Pictures	Public Service
Meter reader	Outside visitor	Public Service
Barber	Field trip or observ.	Personal Service
Beautician	Field trip or observ.	Personal Service
Jeweler	Field trip or disc.	Marketing and Dist.
Store personnel	Observation	Marketing and Dist.
Garage attend.	Field trip or dis.	Public Service
Part 3-Big Cities		
Steelworker	Pictures and disc.	Construction
Musician	Poster	Fine Arts and Humanities
Professor	Outside visitor	Public Service
Teacher	Observation	Public Service
Museum personnel	Discussion	Fine Arts and Humanities
Baseball player	Observation	Hospitality and Rec.
Tour guide	Discussion	Hospitality and Rec.
Sculptor	Pictures	Fine Arts and Humanities
Artist	Pictures	Fine Arts and Humanities
Umpire	Observation	Fine Arts and Humanities
Grounds keeper	Storytelling	Fine Arts and Humanities
Song writer	Discussion	Fine Arts and Humanities
Conductor	Pictures	Fine Arts and Humanities

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 3	Community Needs	pp. 52 - 77

Part 1 - Communities and Their People

Grocery cashier	Role playing	Marketing and Dist.
Parking attend.	Discussion	Public Service
Cannery pers.	Discussion	Manufacturing
Carpenter	Observation	Construction
Sewing mach. opr.	Discussion	Manufacturing
Librarian	Outside speaker	Public Service
Cowboy	Role playing	Agri-Bus; Nat. Resources
Lumberjack	Discussion	Agri-Bus; Nat. Resources
Sawyer	Discussion	Agri-Bus; Nat. Resources

Part 2 - Transportation and Communication

Mailman	Observation	Public Service
Pilot	Pictures	Transportation
Tugboat cap.	Pictures	Transportation
Stewardess	Disc. and pictures	Transportation
Cargo driver	Observation	Transportation
Railroad pers.	Pictures and disc.	Transportation
Television announc.	Observation	Communication and Media
Television rep.	Observation	Communication and Media
Harbor pilot	Pictures	Transportation
TV cameraman	Observation	Communication and Media
Newspaper pers.	Class room newspaper outside visitor	Communication and Media
Railroad eng.	Discussion	Transportation
Railroad cond.	Pictures and disc.	Transportation

Part 3 - Community Government

Mayor	Mini-unit	Public Service
Councilman	Mini-unit	Public Service
Lawyer	Mini-unit	Public Service
Tax collector	Mini-unit	Public Service
Treasurer	Mini-unit	Public Service
City manager	Mini-unit	Public Service
Commissioners	Mini-unit	Public Service
Rec. or park dir.	Mini-unit	Hospitality and Rec.
Public health nurse	Mini-unit	Health

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 4	Maps and Globes	pp. 78-101
Mapmaker	Discussion	Public Service
Photographer	Discussion	Comm. and Media
Unit 5	Communities in Warm Lands pp. 102-103	
Part 1-Hawaii		
Open air shopkeeper	Pictures	Marketing and Dist.
Hotel personnel	Discussion	Hospitality and Rec.
Pineapple farmer	Pictures and disc.	Agri-Bus; Nat. Res.
Sugar cane farmer	Discussion	Agri-Bus; Nat. Res.
Surfer	Pictures	Hospitality and Rec.
Hawaiian dancers	Role playing	Fine Arts and Humanities
Fishermen	Pictures and disc.	Marine Science
Part 2-Mexico		
Religious leaders	Discussion	Fine Arts and Humanities
Farmers	Pictures and stories	Agri-Bus; Nat. Res.
Part 3-Puerto Rico		
Tourist	Discussion	Hospitality and Rec.
Explorer	Discussion	Environment
Sugar cane farmer	Pictures	Agri-Bus; Nat. Res.
Unit 6	Communities in Cold Lands pp. 134-157	
Part 1-Alaska		
Prospector	Discussion	Agri-Bus; Nat. Res.
Fisherman	Pictures	Marine Science
Bush pilot	Pictures	Transportation
Part 2-Norway		
Skier	Role playing	Hospitality and Rec.
Lumberman	Discussion	Agri-Bus; Nat. Res.

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 7	Cities Around the World	pp. 158 - 187
Part 1 - Amsterdam		
Part 2 - Toyko		
Part 3 - London		
River taxi driver	Discussion	Transporation

Unit 8	Freedom in America	pp. 188 - 210
Part 1 - The Stars and Strips		
Song writer	Discussion	Fine Arts and Humanities
Part 2 - Being Good Citizens		
Judge	Pictures and Disc.	Public Service
	This would be an excellent time to discuss the importance of work.	
Part 3 - Special Places in Our Country		
President	Discussion and pictures	Public Service
Vice-President	Discussion	Public Service
Congressmen	Discussion	Public Service
Representatives	Discussion	Public Service

SCIENCE

Unit 1 - 2	What is Science?	pp. 7 - 13
Scientist	Pictures, discussion	Environment

Unit 2	Living Things	pp. 15 - 69
Game protector	Discussion	Environment

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 3	The Earth	pp. 71-114
Travel agent	Discussion	Hospitality and Rec.
Unit 4	The Universe	pp. 117-149
Astronomers	Discussion	Environment
Planetarium pers.	Outside speaker	Communication and Media
Astronauts	Articles from newspapers	Transportation
Unit 5	Matter and Energy	pp. 151-189
Inventor	Discussion	Construction
Druggist	Outside visitor	Health
Bowler	Discussion	Hospitality and Rec.
Unit 6	The Human Body	pp. 191-226
Pediatrician	Discussion	Health
Butcher	Pictures	Marketing and Dist.
Nurse	Role playing	Health
Baseball player	Observation	Hospitality and Rec.
Umpire	Observation	Hospitality and Rec.
Typist	Role playing	Business and Office
Doctor	Poster	Health
Surgeon	Discussion	Health
Lab technician	Pictures and disc.	Health

HEALTH

Unit 1	Friends and Friendship	pp. 6-21

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 2	Safety First	pp. 22 - 37
Life guard	Discussion	Hospitality and Rec.
Policeman	Observation	Public Service
School bus dr.	Observation	Public Service
Forest ranger	Discussion	Environment
Playground pers.	Discussion	Hospitality and Rec.
Scout leader	Outside speaker	Hospitality and Rec.
Safety eng.	Discussion	Transportation
Unit 3	How You Know	pp. 38 - 51
Ophthalmologist	Pictures	Health
Optometrist	Discussion	Health
Unit 4	How You Grow	pp. 52 - 65
Dentist	Observation and disc.	Health
Dental hygenist	Outside speaker	Health
Dental technician	Discussion	Health
Unit 5	How You Move	pp. 66 - 79
Ballet instructor	Demonstration	Fine Arts and Humanities
Physical ed. tchr.	Outside speaker	Public Service
Unit 6	Why You Eat	pp. 80 - 93
Dairy personnel	Discussion	Agri-Bus; Nat Resources
Baker	Pictures and Disc.	Public Service
Fisherman	Pictures	Marine Science
Truck farmer	Discussion	Agri-Bus; Nat. Resources
Fruit farmer	Discussion	Agri-Bus; Nat. Resources
Poultry farmer	Discussion	Agri-Bus; Nat. Resources
Radiologist	Discussion	Health
Grocery store pers.	Observation	Marketing and Dist.

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Unit 7	The Clothes You Wear	pp. 94 - 109
Sheep grower	Discussion	Agri-Bus; Nat, Resources
Dress factory pers.	Pictures	Manufacturing
Cotton grower	Discussion	Agri-Bus; Nat. Resources
Shoe Salesman	Observation	Marketing and Dist.
Shoe repairman	Discussion	Personnel Service
Chemist	Discussion	Manufacturing
Clothing salesman	Observation	Marketing and Dist.
Unit 8	How to Stay Well	pp. 110 - 123
Nurse	Outside visitor	Health
Doctor	Discussion	Health
Research scientist	Discussion	Health
Unit 9	Family Living	pp. 124 - 137
Homemaker	Disc. and observation	Consumer and Homemaking
Psychiatrist	Discussion	Health
Psychologist	Discussion	Health

CAREER EDUCATION PROJECT

Summer 1973

Infusion with Social Studies

Text: Regions and Social Needs (Laidlaw)

Ronald C. Boston

Grade 4

UNIT #1

CAREER	SUGGESTED EXPERIENCES	CLUSTER
Brick Layer Carpenter Welder Cabinet Makers Heavy machine operators Cement Contractor	Observation: Instruct pupils to "Look for people working at these jobs." Oral reports: Have pupils report on what they observed. Show and Tell: Have pupils use a visual aid such as a tool or an artical of clothing to tell about a job or what their parents do. Class Visitor: From the working world. Interview: Allow pupils to ask questions to class visitor. Models: of construction or of construction tools.	Construction
Mining Oil and Natural Gas	Examining Specimens: of both raw materials and product or by-product Collect Pictures: showing how man obtains these natural resources Visual Aids: Show film and filmstrips on natural resources. Field Trip: possible visit to a local coal mine.	Environment Construction Agri-business and Natural Res.

UNIT #2

Weather man Well driller Construction dam builder Geologist Irrigation farming Scientist	Show how these jobs may affect the way people live by: Models: Build a flat plane model of a desert with sand. Experiment: Sprinkle water into sand and observe; blow air across sand before it was wet and then after; examine grain of sand under microscope. Pictures: of the way people live and the land and types of plants and animals that live here. Samples: of types of food grown here. Observations: Look in grocery stores for foods from these regions. Sing Songs: Find some songs about living in a desert. Why are cities located in the desert?	Environment Construction Agri-business and Nat. Res.

UNIT #3

CAREER	SUGGESTED EXPERIENCES	CLUSTER
Dairying Farming Lumber industry	Displays: of tools and products Manufacturer's Advertisements: from booklets or farm mag. Posters and Murals: Make illustrations and experience charts.	Agri-Bus and Natural Resources Transportation
Airline work Merchant Marine Railroad employee Truck drivers Bus or taxi drivers Subway transportation	Time Line: of inventions in transportation Records: a record-picture demonstration in available from the elementary library. File-box: Keep continuous 3x5 card file of each new career you come across in your studies with a short description of the job on each card. Scrapbooks: Use artwork or paste commercial pictures. Experience Stories: read to the class or have a pupil read	Transportation
Fishing Pearl cultivation Harvesting sea weel Oil and Mineral deposits Deep sea diving Sea-Lab		Marine Science

UNIT #4

Recycling Landscaping	Paper Drive: Have the class take part in an ecology drive. Visits: to local centers of interest Landscaping of school grounds Discussion: Develop an enjoyment and appreciation as well as pride in historial and lovely things.	Environment and Natural Resources

UNIT #5

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Dairying Livestock raising Grain farming Vegetable farming	Murals: Make murals of the agricultural life. Picture Dictionary: showing the different type of farming in a loose-leaf notebook--arrange in alphabetical order by title. and mount picture to page	Agri-Business and Natural Resources

UNIT #6

Ski instructor Professional Sports Motel owner Park ranger Professional guide Travel agent	Discuss hobbies that become occupations. Discussion Method: of various sports and season or location played. Committee Method: Choose children through democratic procedures to procure information on professions. Letter writing: To gather information. Discussion: of the differences between amateur and professional sports.	Hospitality and Rec.

UNIT #7

Farming Lumbering	Map-Making: Make a pictorial natural resources map of our country and discuss various occupations. Seasons: Each season can be related to certain jobs.	Agri-Business and Natural Resources
Government	Discussion: What are some things that must still be done if democracy is to grow. Lists: of pictures, writings, and speeches that have marked our country's development.	Public Service

UNIT # 7 Cont'd.

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Buyer Warehouse jobs Advertising Salesman Delivery man Shipping	Role Playing: Have part of the class act out the role and the rest try to guess. Games and Puzzles: The teacher makes cards cut into puzzles or match cards under occupations.	Marketing and Distribution
Draftsman Assembly Line Worker Designing Packaging Machine Operator Re-cycling	Class Newspaper and Creative Writing: Make an advertisement for "Jobs Wanted" pages of a newspaper, listing the job description and qualifications, etc.	

UNIT #8

Military Teachers Police Government workers Fireman Public Utilities	Bulletin Board: of all materials collected by the children Programs: Present a program using folksongs, poems, and drama. Discussion: of community pride and civic projects	Public Service
Telephone Operator Newspaper man Radio announcer Telegraph opr. Television Post Office	Construction of booklet covers Reference Material: Make a class or individual booklet from reports and illustrations. Time Line: Using long sheets of paper, record the dates and pictorial illustrations of breakthroughs in the use of communications and media. Mini-Unit: Try a 3-5 day unit on famous Americans and their occupations and contributions.	Communications and Media

UNIT #8

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Doctor	Possible Visits: to hospital or dental clinics	Health
Nurse	Class Visit and Demonstration: by the Columbia County Chapter of the Nurses Auxiliary.	
Dentist	Direct Teaching Periods: Utilizing daily experience of pupils	
Druggist	Morning Health Survey	
Surgeon	Incidental Teaching: as health situations arise.	
Physical Therapist	Demonstrations: of good breakfast or care of the teeth, etc.	
	Class Visit: by dental hygienist and nurse	

UNIT #10

Grocer	Club Activities: Possible tie-in with Brownies, Cub Scouts or 4-H, etc.	Consumer and Homemaking
Clothing stores	Field Trip: to a department store	
Interior Decorator	Handicraft of Hobby Show: of useful talents to homemaking	
Department stores	Equipment Show or List: Show or list facilities needed for cooking, camping, the workshop, etc.	
Dry Cleaners		
Bakery		

UNIT # 11

Barber	Demonstrations: Have pupils or parents for hair styling or similar experience.	Personal Services
Hair Dresser	Directed Discussions: of home, chores, and children's responsibilities to develop awareness of occupations that utilize similar skills.	
Veterinarian	Self Perception: activities that develop better attitudes toward personal contributions to society.	
Landlord	Survey: of the community to find out what personal service jobs boys and girls may participate in.	
Undertaker		
Weight Watchers		

UNIT #12

CAREER	SUGGESTED EXPERIENCE	CLUSTER
Actor Author Musician Dancer Interpretor Artist	Field Trip: Possible appreciation experience by taking children to B.S.C. production. Assembly Program: Arrange with I.U. to put on a fine arts program in each building. Fine Arts Show or Exhibits: display in the halls reproductions of famous artists or of handicrafts. Assembly Programs: Arrange with the music or art teacher to put on an assembly program using the talents of the pupils. A.V.: Use movies, slides, film strips, or reproduction prints. Classroom Decorations: Endeavor to keep the room attractive. Directed Discussion: Encourage children to share art objects from home and discuss trips taken by children. Encourage creative and imaginative work.	Fine Arts and Humanities

ADDITIONAL INFORMATION

Here are some careers and definitions developed by the fourth grade pupils at the Mifflinville School while studying the Social Studies Unit: "Things Famous Americans Have Done," and "Your Part as A Young American" during the 1972-1973 school year. Each child was responsible for saying a career part in an assembly program with the second and third grades as an audience.

While you may not agree with their use, classifications, or grammar, they are included merely to give an idea of what fourth grade students can do with creative writing.

CAREER EDUCATION

AGRI-BUSINESS AND NATURAL RESOURCES

1. Dairying-The raising of milk-producing cattle (quernsey and holstein) for milk and milk products such as butter and cheese.

2. Farming-Preparing the soil to grow either grain crops or fruit and vegetable crops.

3. Mining-A miner works either in an underground tunnel or an open pit. His job is to take the rocks containing minerals such as coal, copper, silver from the ground.

4. Oil and Natural Gas-In these jobs you drill down far under the ground or even under the ocean in order to pipe out natural gas and oil.

5. Lumber Industry-The harvesting of trees for use in the production of paper and building products such as boards, plywood and paneling.

6. Geologist-A geologist studies rocks and rock formations in order to tell more about our history and also to find new minerals, etc.

TRANSPORTATION

1. Airline work-These are jobs where one may work at an airport or on an airplane. These jobs include pilots, members of the crew or even stewardesses.

2. Merchant Marine-These jobs are on ocean going vessels carrying goods from one country to another country.

3. Railroad Employee-These jobs are on trains which carry goods or people from place to place.

4. Truck Driver-A person who drives the big trucks carrying and moving goods from place to place on our highways.

5. Bus or Taxi Drivers-These drivers transport people from place to place.

6. Subway Transportation-This form of transportation operates undergound and carries people form place to place.

CONSTRUCTION

1. Brick Layer-A brick layer places mortar cement between brick or blocks to form a wall either below ground level to make a cellar wall or above to make an outside wall. He is also know as a mason.

2. Carpenter-This person does the framing and other wood work involved in building.

3. Welder-This person is involved in metal work on building and other frams. He may melt pieces of metal together or use other adhesives to form his frames. Car frames are made this way.

4. Cabinet Makers-A cabinet maker is skilled in making the fine furniture we use in our homes.

5. Heavy Machine Operators-These men drive bulldozers, cranes, shovels and other large machines either to move earth or move heavy materials on construction such as bridges, roads, or large buildings.

6. Cement Contractors-These men pour mixed cement into forms to build roads, sidewalks, floors, bridges, porches and other parts of buildings.

PUBLIC SERVICE

1. Military-These jobs are in the Army, Navy and Air Force. These brave men are always ready to defend our country and to help in natural disasters.

2. Teachers-These people work in schools and colleges to train minds to work and get along in our world.

3. Police-These men work to protect us by keeping law and order. They also direct traffic as well as many other helpful tasks.

4. Government-This is a group of people who we choose to represent us in keeping order in our towns, states, and nation. Some of these representatives are mayors, governors, and the President.

5. Firemen-These brave men not only fight fires, but also help people in many others types of distress.

6. Public Utilities-People working in public utilities are employed by electric companies, telephone companies, gas companies, and post offices. Some of these people are office workers, meter readers, as well as the people who do the installation work.

CONSUMER AND HOMEMAKING

1. Grocery Store-These people may work in such stores as Acme Markets or Weis Markets. These jobs include check-out clerks, meat cutters or people who stock the shelves.

2. Clothing Stores-A person employed in a clothing store may work as a manager, a sales person or may even be employed as a purchaser.

3. Interior Decorator-An interior decorator is hired to design and decide on the furnishings and colors to be used within a house or other building. They must also hire the workers to do the work.

4. Department Stores-A department store has many departments and sells many different items. People who work in these stores may be sales clerks, stock clerks, managers, and others.

5. Dry Cleaners-These people pickup and deliver items of clothing, draperys, rugs and other items which they have cleaned.

6. Bakery-These people bake and sell items of food which most of us don't prepare for ourselves.

HEALTH

1. Docotr-A doctor is trained to care for the human body. He may take care of all parts of the body or just certain organs of the body.

2. Nurse-A nurse is a person dressed all in white. Her main job is at the hospital helping sick patients to get well again.

3. Dentist-The dentist helps us to keep our teeth healthy and white, by making repairs on our teeth whenever we visit him.

4. Druggist-The druggist helps all of us who are sick and need a prescription filled for medicine. You can usually find a druggist in a drugstore and he is waiting for your doctor's prescription so he knows what kind of medicine you need.

5. Surgeon-A surgeon is a special kind of doctor who operates on patients. He can remove our appendics or tonsils if it becomes necessary.

6. Physical Therapist-A physical therapist is a person who is trained to help people use different parts of their body if they have a problem. He may help someone to walk who has polio or some other ailment.

PERSONAL SERVICES

1. Barber-A barber has the job of cutting hair and shaving his customers. He usually works on men.

2. Hair Dresser-A hair dresser or hair stylist usually deals with women's hair styling. She can cut hair, shampoo it, set it, give perms and many other duties to help improve a woman's looks.

3. Veterinarian-A veterinarian is like a doctor, but he only treats animals. If our dog or cat is sick, we take him to the vet and he can make him well.

4. Landlord-A landlord is a person who will rent a house or rooms to people to live in.

5. Undertaker-An undertaker has the important job of burying people who are dead.

6. Weight Watchers-A weight watchers club is organized to hlep people lose weight. The leader must show exercises and diets people can use.

COMMUNICATION AND MEDIA

1. Telephone Operator-The operator helps us to talk on the telephone with our relatives who live far away from home.

2. Newspaper Man-Newspaper men make it possible for us to read about all the news going on in the world around us.

3. Radio Announcer-A radio announcer helps us to hear the news report, music and local news on the radio through wires.

4. Telegraph Operators-We can send messages on paper to people by telegraph and it is assured that the message is personally delivered.

5. Television-Television aids us in seeing programs and news. There are many jobs required to make television possible. Some of these jobs are actors, photographers, and stage hands to mention a few.

6. Post Office-We receive information by letters in the mail. There are many jobs in the post office.

BUSINESS

1. Secretary-A secretary has many jobs. She types, copies letters, and files records in her office.

2. Computer Programmer-A computer programmer helps make office work easier by running a computer.

BUSINESS Cont'd.

3. Business Manager - A business manager has the role of taking care of all the business which comes into his office.

4. Bank Clerk - In a bank office it is the clerk's job to record all our deposits and withdrawals, and keep a record of all the money in the bank.

5. Finance Officer - In a finance office the business people keep records of all their business activities.

6. Travel Agent - Travel agencies have jobs dealing with ticket selling, making reservations and claiming baggage.

FINE ARTS AND HUMANITIES

1. Actor - An actor performs on a stage to entertain people during a play.

2. Author - An author is a person who writes books or stories for magazines and newspapers.

3. Musician - A musician may play an instrument in a band or even be a singer.

4. Dancer - A dancer is a person who moves his body and feet in a special way to entertain people.

5. Interpretor - An interpretor is a person who speaks two or more languages and tells or writes what the person speaking is saying.

6. Artist - An artist is a person with a special talent to paint or create special art work.

HOSPITALITY AND RECREATION

1. Ski Instructor - The ski instructor teaches beginning skiers how to ski.

2. Professional Sports - Jobs in professional sports include playing football, baseball, basketball, golf, and hockey for money as a full-time job.

3. Motel Owner - Motel owners provide a place for out-of-towners to stay over night.

4. Park Ranger - These rangers help campers find a camping sight and patrol the campsights at night.

HOSPITALITY AND RECREATION Cont'd.

5. Professional Guide-A professional guide takes tourists on sightseeing trips or hunters or fishermen to game sights.

6. Travel Agent-A travel agent helps tourists obtain tickets and reservations on trips to other countries.

ENVIRONMENT

1. Game Warden-Protect animals from hunters who break the law.

2. Forest Ranger-The forest ranger protects our forests from harm by fires and helps to protect the trees so they may grow.

3. Forest Fire Fighters-These fire fighters fight forest fires and sometimes help to find lost children.

4. Pollution Control-People who work for the pollution control check factory waste materials entering the rivers and smoke stacks for air pollution.

5. Weatherman-A weatherman studies the wind, temperature and clouds in order to tell us what kind of weather we will have.

6. Cloud-Seeder-A cloud-seeder drops dry ice into certain clouds in order to make it rain.

MARINE SCIENCE

1. Fishing-Fishermen usually use fishing boats with radar, and net to catch fish from the ocean.

2. Pearl Cultivating-People who cultivate pearls plant sand grains in oysters and then come back to claim the pearls after they are mature.

3. Harvesting Sea Weeds-Sea plants which are rich in protein are taken from the ocean and used in food products.

4. Oil and Mineral Deposits-Oil and mineral deposits are mined from under the ocean.

5. Deep Sea Diver-A deep sea diver is a man who wears a special suit and dives down under the ocean to explore and do other jobs.

6. Sea-Lab-A sea-lab is a special submarine used for exploring under the ocean.

MARKETING AND DISTRIBUTION

1. Buyer - A buyer orders and purchases items from the manufacturer and puts them in the stores for sale.

2. Warehouse Jobs - In warehouses goods are stored after they are made in factories. Men use machines to load and unload materials.

3. Advertising - Men who work in advertising use their art talent and clever words to make billboards and magazine adds. Actors also do television commercials to advertise.

4. Salesman - A salesman goes from store to store to sell his product.

5. Delivery Man - A delivery man usually drives a truck and delivers goods brought in stores to the homes.

6. Shipping - A shipper may be a trucking company that ships goods from the factory to the store or home.

MANUFACTURING

1. Draftsman - A draftsman is a person who makes a drawing of something to be made.

2. Assembly Line Worker - An assembly line worker works in a factory and helps to put something together.

3. Designing - A designer may think of a new dress design or design a car.

4. Packaging - Factories have packing departments where their products are boxed.

5. Machine Operator - A machine operator runs a machine in a factory to produce a product or part of a product.

6. Re-cycling - People who work in re-cycling melt glass and metal products such as junk car bodies in order to use these materials over again.

CENTRAL COLUMBIA SCHOOL DISTRICT

CAREER EDUCATION WORKSHOP

July 9-27,1973

PROPOSED DOCUMENTATION PROCEDURES OF STUDENT CAREER ACTIVITIES IN THE CENTRAL COLUMBIA MIDDLE SCHOOL IN AN EFFORT TO DEVELOP A CAREER PROFILE OF EACH STUDENT

Submitted by: K. Norquest
S. Eisenhauer
E. Laubach
O. Shotwell
C. Gass
R. Thomas

PREFACE:

The Career Education Committee of the Central Columbia middle School is of the opinion that our staff has successfully infused Career Education into our curriculum vehicle as evidenced by out prepared list of career activities documenting our 1972-73 efforts. However, the fact that we encompassed all 15 career clusters was pure chance. Therefore, we fell that our task at this time is to provide machinery that will insure that each student in our school has had the opportunity to: develop an awareness of, and in fact, do some exploratory investigation in all clusters of Career Education.

To accomplish this task we must be made aware of what these students have done in the career areas before they have come to us, and conversly, what degree of competency is expected of them when they leave.

We also percieve as a major part of our task, our obligation to encourage and secure the cooperation of our entire staff. This may well be our most important endeavor, for without their efforts we have no program. To insure their continued cooperation and enthusiasm we must assure them that we have no intentions of infringing upon their flexibility in curriculum development or time utilization. We must, however, encourage them to include and emphasize careers in all aspects of our educational program. We must also provide them with information on each student that will document what has been done and what needs to be done, hence the aforementioned machinery.

I. OBJECTIVES

A. To provide recorded evidence that each student in grades five through eight in the Central Columbia Middle School have had career exploration experiences in all 15 clusters through instruction, visitation, investigation, or experimentation.
B. To provide a record of all career packet requests made by every student in the Central Columbia Middle School grades five through eight.
C. The aforementioned objectives coupled with a listing of each student's mini-courses selections will indicate students career inclinations at the Middle School level and will provide the High School with a profile of students career exploration envestigations.

B. Administration of an evaluation instrument (to be determined later) as a pre-test in grade five and a post-test in grade eight.

C. Prepare a monthly newsletter that will inform all district teachers of the exploration activities that have been infused into the Middle School curriculum.

D. The Career Program director is requested to prepare a monthly newsletter of career education progress at all grade levels.

NOTE: Attached are suggested forms to be used in recording data on individual student's career activities and investigations.

CAREER AWARENESS EXPERIENCE NAME _____

1. Fine Arts & H.					
2. Transportation					
3. Con. & Home Ec.					
4. Marine Science					
5. Per. Service					
6. Construction					
7. Comm. & Media					
8. Hosp. & Rec.					
9. Manufacturing					
10. Mkt. & Dist.					
11. Health					
12. Pub. Service					
13. Environment					
14. Ag. Bus. & Nat. R.					
15. Bus. & Office					

INSTRUCTIONS:

Place check in block where child has had some awareness experience. More than one check may be placed in one block.

CAREER EXPLOR. EXPERIENCES NAME _____

(place date - month, year - of activity in blocks starting at left.)

	Grade 5	Grade 6	Grade 7	Grade 8
1. Fine arts & H.				
2. Transportation				
3. Con. & Home Ec.				
4. Marine Science				
5. Per. Service				
6. Construction				
7. Comm. & Media				
8. Hosp. & Rec				
9. Manufacturing				
10. Mkt. & Dist.				
11. Health				
12. Pub. Service				
13. Environment				
14. Ag. Bus. & Nat. R.				
15. Bus. & Office				

CAREER PACKET REQUESTS

Packet Numbers	
	Grade 5
	Grade 6
	Grade 7
	Grade 8

MINI - COURSE

	Grade 7		Grade 8
1		1	
2		2	
3		3	
4		4	

COMMENTS:

5 _____

6 _____

7 _____

8 _____

CENTRAL COLUMBIA HIGH SCHOOL
4777 Old Berwick Road
Bloomsburg, Pennsylvania

CAREER EDUCATION PROGRAM

The career education objective on the secondary school level is to prepare all students for a successful life of work. It is assumed that some time prior to leaving school the student will have defined his broad occupational preference by systematically relating it to his achievement in different courses and to his interests, talents, and general academic ability. It is further assumed that the student will be able to analyze his competency in skills necessary to reach his broad occupational preference and develop a plan of alternate ways of accomplishing his occupational goals if his first choice is not successfully implemented.

It is recognized that there are four levels of entry into the world of work upon leaving school. These are: (1) Continuing education in a college or university working toward a professional career; (2) Continuing education in a trade or technical school working toward a technical career; (3) Entry into the world of work directly from secondary school in a non-professional career; (4) Delaying entry directly into the world of work because of marriage, physical or mental handicap, military service, lack of job availability, or personal choice.

The secondary school career education program has been developed within a broad, comprehensive, open-access curriculum which provides all students opportunities for full and complete personal development in the cognitive and affective domains. Courses are offered which appeal to the interests, abilities, and needs of all students regardless of their career objectives or post-high school plans. Curriculum development, revision, and implementation is a continuous, never-ending process.

Since it is recognized that demands of the world of work are in a constant state of change, the high school curriculum and scheduling procedures must be viable and flexible.

Mini-courses and/or semester course are offered to provide students with a wide and varied selection of educational experiences. However, full year courses will continue to be offered in areas where in-depth study is needed.

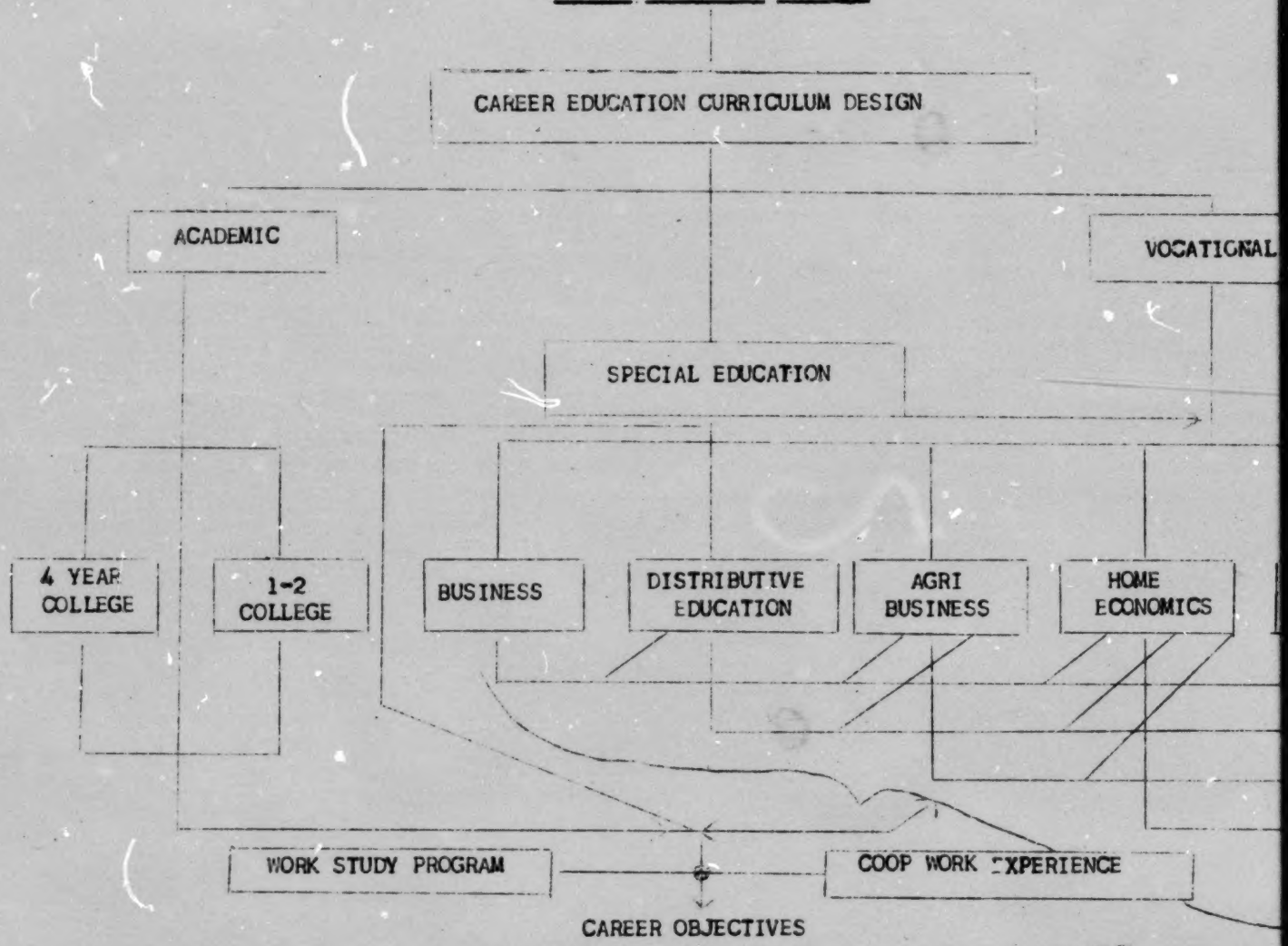
Incorporated within the curriculum design must be opportunities for students to select courses in all areas of the educational program. Labeling students as college preparatory, academic, vocational or general should be avoided because of restrictions or negative connotations associated with such terms in the traditional educational setting.

Each student must be offered the opportunity to develop his course of study around his preparation objective which would prepare him for continuing education at the post-high school level or entry directly into the world of work.

The culminating activity within the career education curriculum design is a cooperative work-study program which enables each student to apply the theories of the classroom to the demands of the world of work. Such practical experiences provide both the student and the school with an effective continuing evaluation of the total school program.

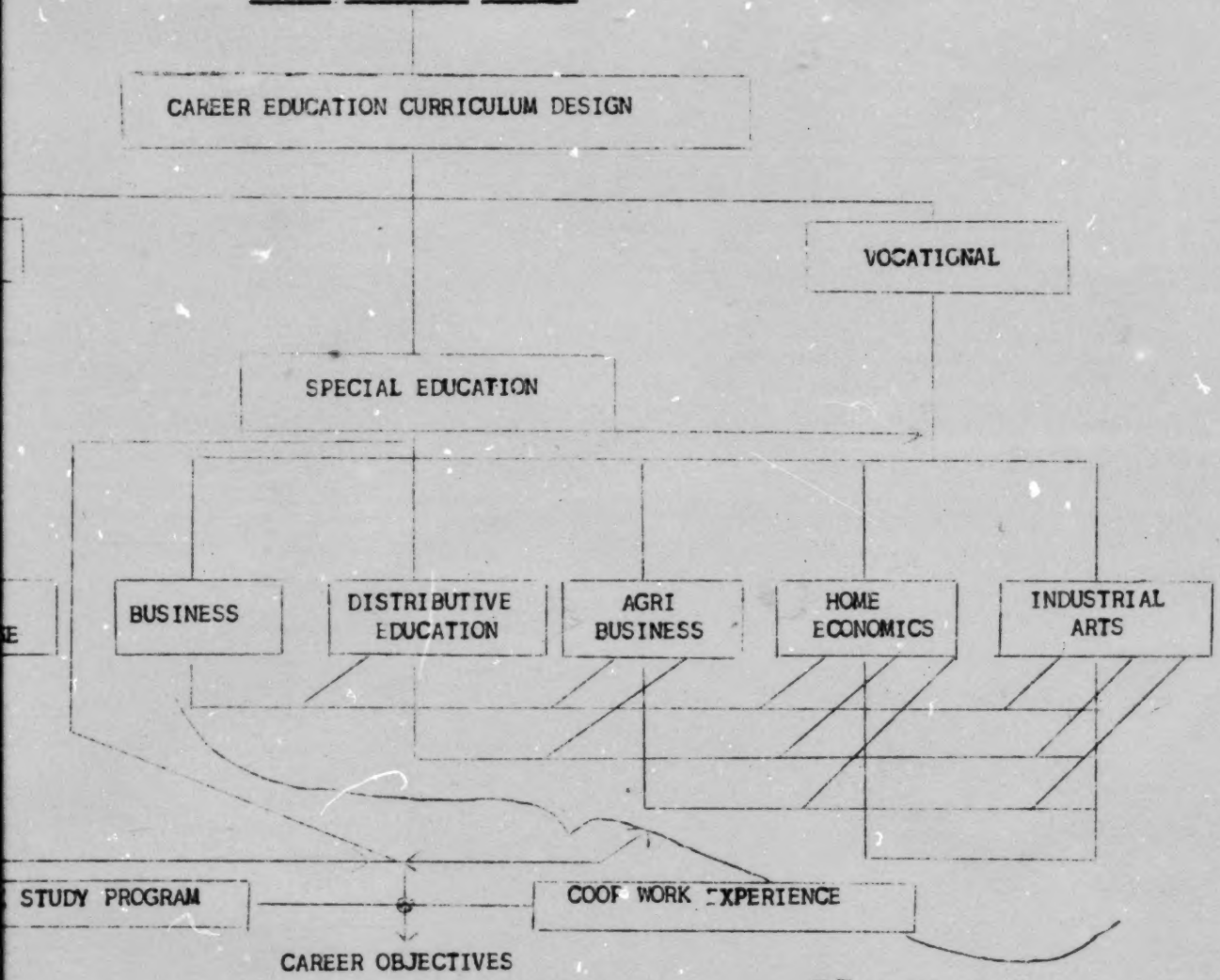
CENTRAL COLUMBIA HIGH SCHOOL

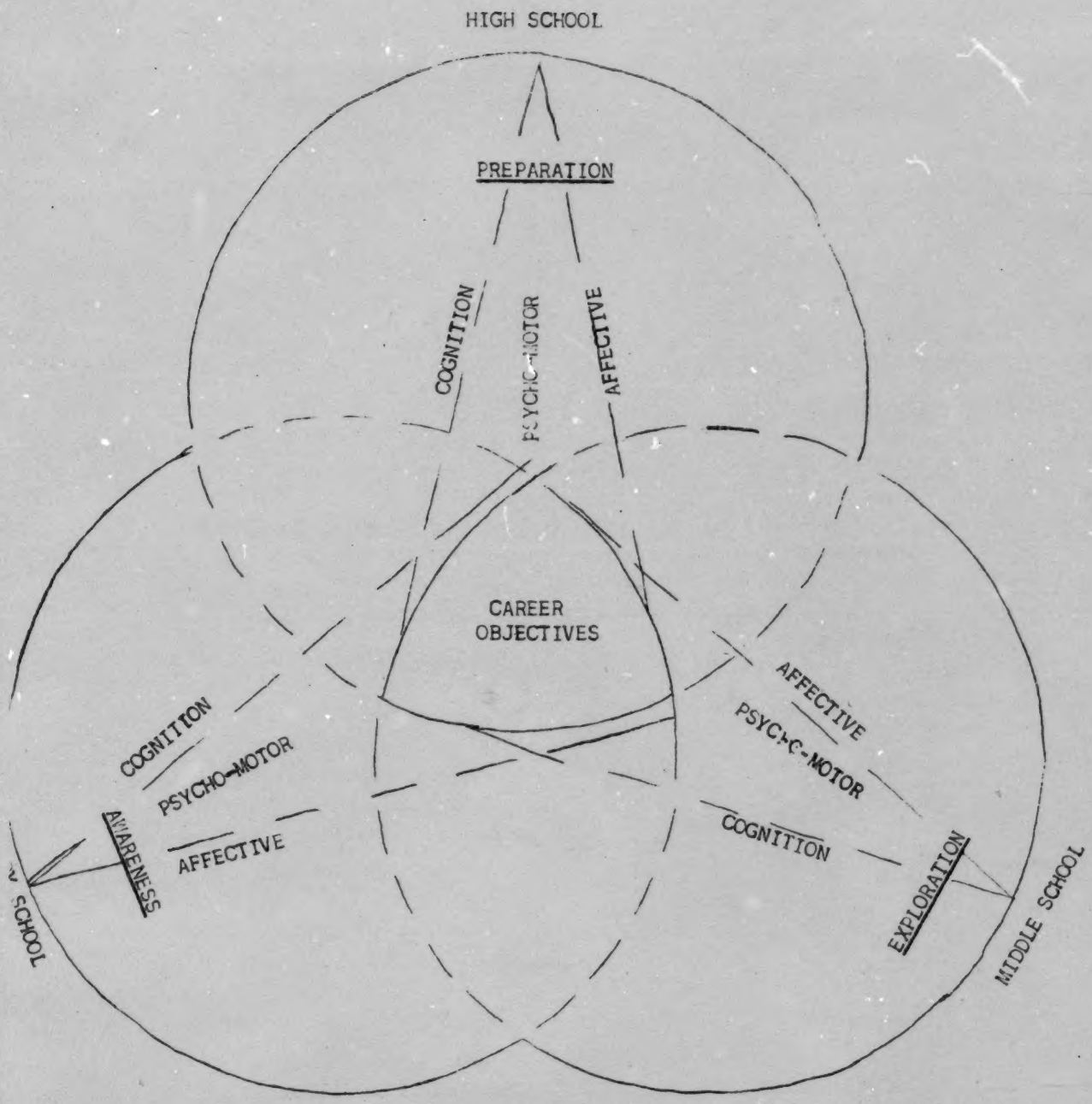
CAREER EDUCATION PROGRAM



CENTRAL COLUMBIA HIGH SCHOOL

CAREER EDUCATION PROGRAM





SUGGESTED CAREER EDUCATION MODEL

CENTRAL COLUMBIA SCHOOL DISTRICT

CENTRAL COLUMBIA HIGH SCHOOL
4777 Old Berwick Road
Bloomsburg, Pennsylvania 17815

SECONDARY VOCATIONAL EDUCATION

Agriculture

402 Agriculture Mechanics
400 Agriculture Production
403 Agriculture Products
405 Agriculture Resources
401 Agriculture Supplies
406 Forestry
404 Horticulture
499 Agriculture, Other Than Above

Useful Home Economics

601 Child Development
602 Clothing and Textile
603 Consumer Education
604 Family Health
605 Family Relations
606 Foods and Nutrition
607 Home Management
608 Housing/Home Furnishing
699 Useful Home Economics, Other Than Above

Business Education

700 Bookkeeping/Accounting
701 Business Data Processing
702 General Clerical
708 Shorthand I, II
709 Office Practice
710 Socio-Business Subjects
706 Stenographic/Secretarial
707 Typing I, II
799 Business Education Other Than Above

Distributive Education

800 Distributive Education, Unspecialized
801 Advertising Services
805 Apparel and Accessories
810 Automotive
815 Finance and Credit
817 Floristry
819 Food Distribution
820 Food Services
830 Garden Supplies/Building Materials
825 General Merchandise
835 Hotel and Lodging
840 Industrial Marketing
845 Insurance
850 International Trade
855 Personal Services
860 Petroleum
865 Real Estate
870 Recreation/Tourism
875 Transportation/Warehousing
880 Retail Trade, Other Than Above
885 Wholesale Trade, Other Than Above
899 Distributive Education, Other Than Avove

CENTRAL COLUMBIA HIGH SCHOOL
4777 Old Berwick Road
Bloomsburg, Pennsylvania 17815

COOPERATIVE WORK EXPERIENCE PROGRAM

The Trainee, _____, agrees

1. To be punctual.

2. To display, at all times, good work habits.

3. To notify the employer, on any day when it is impossible to be at work. When it is impossible to report for work on Saturday or holidays, notification to be given by 8:30 a.m.

4. To notify the school, not later than 8:15 a.m., on any day when it is impossible to attend.

5. To secure the coordinator's permission to work on days when absent from the morning or afternoon of school.

6. To discuss controversial job problems with the coordinator, who in turn, will discuss same with the employer.

7. To perform school work and employer's work effectively: I understand that failure to do so will result in removal from this training program.

8. To live up to all rules and regulations as outlined by the employer.

9. To work for the best interests of the employer.

10. To keep matters of business in strict confidence.

11. To make the best use of any or all training materials furnished for study by the employer.

12. To look to the job ahead.

13. Not to sever connections with the training agency without consent of the coordinator, and then only after the coordinator has made the necessary arrangements with the employer.

14. To keep school and work absenteeism at an absolute minimum.

_____, Student

_____, 19 ____

CENTRAL COLUMBIA HIGH SCHOOL
4777 Old Berwick Road
Bloomsburg, Pennsylvania 17815

WORK EXPERIENCE TRAINING MEMORANDUM

TRAINEE_____ DATE_____

TRAINING STATION_____ SUPERVISOR_____

_____

This training program in cooperative work experience is designed as a full-year course with an average minimum of 15 hours per week required for the work experiences and at least 1 period in each school day required for the supervised and directed study of technical and related subjects.

The training agency agrees to pay the trainee at an hourly wage. The employer may raise the hourly pay of the trainee without the approval of the coordinator. The employer will not reduce the hourly pay of the trainee without first securing the approval of the coordinator.

_____, (trainee) agrees to enter into this training program with _____(training agency) and render his best efforts at all times. The trainee agrees to consult his coordinator in regard to any complaint he may wish to make and will not sever employment with the training agency without first securing the approval of the coordinator.

The training agency agrees to give varied training experiences; to follow the schedule of hours listed above or as business conditions permit; to give an average minimum of 15 hours work per week; not to discharge the trainee without first consulting the coordinator in regard to such matter. The training agency does reserve the right to discharge the trainee for any reason which the organization cannot tolerate in regard to the actions of the trainee while in its employ.

The parents or guardians of the trainee agree to be responsible for the conduct of their child while working for the above named training agency. The parents will assume all responsibility relative to the mode of transportation used by their child in traveling to and from his place of employment.

The coordinator agrees to hear complaints of all parties and to take the necessary action in reaching a suitable solution to such complaints. He also agrees to give the training needed to the best of his ability and according to facilities that are available.

STUDENT_____ PARENT_____

TRAINING AGENCY_____ COORDINATOR_____

NOTE: Each student-trainee is required to purchase school insurance.

Parental Consent

CENTRAL COLUMBIA HIGH SCHOOL
4777 Old Berwick Road
Bloomsburg, Pennsylvania 17815

Dear Parent:

Your son/daughter _____ has been selected on the basis of school records, interest, and personality as eligible to enter our cooperative work-experience program. This is specialized training for those who desire to be exposed to the "world of work" before graduation. This program is worked on a cooperative part-time basis: _____ will attend school one half day and be gainfully employed the other half. She/He has expressed interest in this work and a desire to enter the program.

Through the cooperation of the businessmen of our community, the students work under supervision at least fifteen hours a week in a regularly paid position. The exact hours of employment depend upon the businessman's need, and usually include Saturdays.

In school she/he will learn today what she/he will put into practice tomorrow. You probably know that a great many high school graduates enter the "world of work" after graduation and that there is a great need for specialized training.

School credit toward graduation will be given for the part-time work, and your son/daughter will receive the same diploma for which she/he is now working.

If you are willing for _____ to enter this course, please sign in the space provided below.

Sincerely yours,

_____
Teacher-Coordinator

Parent or Guardian _____

CENTRAL COLUMBIA SCHOOL DISTRICT
~~4777~~ Old Berwick Road
Bloomsburg, Pennsylvania 17815

NOTICE OF UNSATISFACTORY PERFORMANCE

This notice serves as a warning to you that your performance in your training station does not come up to acceptable standards. You are deficient in one or more of the following duties of your job responsibility:

( ) Customer service

( ) Departmental up-keep

( ) Checking merchandise

( ) Ordering merchandise

( ) Inventory control (shortage)

( ) Personal appearance

( ) Unsatisfactory sales performance

( ) Absenteeism

( ) Tardiness

( ) Job knowledge

( ) Failure to follow instructions

( ) Insubordination

( ) Violation of company rule

( ) Other reason

Comments made at time of issuing notice:

_____

_____

_____

_____

Student-learner's signature

Manager's signature

Principal's signature

Coordinator's signature

Date

WEEKLY PROGRESS REPORT

Name _____ Week of _____

to _____

Number of days worked this week _____

Total hours worked this week _____

What new jobs did you learn this week:

What phases of your work did you enjoy the most this week:

What helpful instructions did you receive that enabled you to do better on the job: (from supervisors, fellow-employees, customers, etc.)

What job activity did you have this week in which you feel you could do better the next time it becomes your responsibility:

What remarks were made to you this week that caused you to feel that you were performing acceptably on the job:

Cite some interesting incident that happened in your place of business during the week: (This does not have to involve you)

Do you have any information pertinent to your place of employment, or your job, that may be of importance to your coordinator at this time:

What classroom instruction or activity this past week was the most helpful, meaningful, or interesting:

CENTRAL COLUMBIA HIGH SCHOOL
4777 Old Berwick Road
Bloomsburg, Pennsylvania 17815

Coordinator's Initials _____

PERSONAL DATA SHEET

Full Name: _____
Last First Middle Initial

Date: _____

Address: _____

_____

Telephone: _____

Preferred Employment Field:

_____

Date available for Employment:

_____

Personal Data:

Date of Birth: Age:

Height: Health:

Weight: Defects:

Work Experience: (If any)

(employer - address - length of employment - type of work done)

1. _____

_____

_____

Experience Obtained: _____

_____

From: _____ To: _____

2. _____

_____

_____

Experience Obtained: _____

_____

From: _____ To: _____

Education:

(schools attended - dates - major areas of study)

Honors, Extracurricular Activities, and Interests:

References (no relatives): List one student

(names, titles, and mailing addresses)

1. _____ 2. _____

_____ _____

_____ _____

CENTRAL COLUMBIA HIGH SCHOOL

COOPERATIVE WORK EXPERIENCE PROGRAM

NAME_____ HOME PHONE_____

TRAINING STATION_____ PHONE_____

WEEK OF_____

SCHEDULE

	From	To	Total Hours
Monday	_____	_____	_____
Tuesday	_____	_____	_____
Wednesday	_____	_____	_____
Thursday	_____	_____	_____
Friday	_____	_____	_____
Saturday	_____	_____	_____
Sunday	_____	_____	_____

Total Hours for Week_____

CENTRAL COLUMBIA HIGH SCHOOL

COOPERATIVE WORK EXPERIENCE PROGRAM

NAME_____ HOME PHONE_____

TRAINING STATION_____ PHONE_____

WEEK OF_____

SCHEDULE

	From	To	Total Hours
Monday	_____	_____	_____
Tuesday	_____	_____	_____
Wednesday	_____	_____	_____
Thursday	_____	_____	_____
Friday	_____	_____	_____
Saturday	_____	_____	_____
Sunday	_____	_____	_____

Total Hours for Week_____

CENTRAL COLUMBIA HIGH SCHOOL

COOPERATIVE WORK EXPERIENCE PROGRAM

Rating Sheet

Name of Trainee _____

Company _____

Position _____

Date of Report _____

I.	Dependability	
II.	Accuracy	
III.	Initiative	
IV.	Personal Appearance	
V.	Punctuality & Attendance.	
VI.	Ability to work with others	
VII.	Interest & Enthusiasm	

A--100-93 B--92-85 C--84-77

D--76-70 E--69 and below

Please give your grade estimate in each of the seven categories in percent.

Comments:

_____

Supervisor

EXPLANATION OF ITEMS TO BE RATED BY TRAINING SPONSORS

FOR COOPERATIVE WORK EXPERIENCE STUDENTS ON THE JOB

Attendance and Punctuality--

1. Notifies Dept. when he or she will be out from work.
2. Arrives at work on time.
3. Returning from breaks and lunch on time.
4. Arranging for lateness or time off in advance.
5. Giving the impression of alertness and "being all there."
6. Completing work by the deadline.

Personal Appearance--

1. Dresses according to the rules.
2. Grooming is above reproach.
3. Never gives the impression he needs more sleep.
4. Speaks well and shows good choice of words.
5. Presents a business like appearance.

Initiative--

1. Looks for ways to improve.
2. Is a real "hustler."
3. Does not have to be told what to do next.
4. Is inquisitive.
5. Is able to think for himself without excessive supervision.

Workmanship--(This includes ability to learn, quality, and quantity of work.)

1. Budgets his time carefully.
2. Shows thoroughness in his work.
3. Feels that even routine jobs are important.
4. Is accurate and careful, giving attention to details.
5. Gets the job done in a minimum amount of time.

Attitudes Toward Work--

1. Is enthusiastic, not cool about his work.
2. Does not have the attitude that he is perfect.
3. Recognizes the value of the training opportunity offered him.
4. Has gained satisfactory speed and accuracy on his job.
5. Has achieved business like habits.

Human Relations--

1. Cooperates with supervisors and accepts suggestions.
2. Courteous and friendly manner, but not "too friendly.
3. Controls his emotions for the best interest of all.
4. Does not cause dissension.
5. Responds to the best in others.

CENTRAL COLUMBIA HIGH SCHOOL
4777 Old Berwick Road
Bloomsburg, Pa. 17815

CAREER OBJECTIVE

Date _____

STUDENT _____

ADDRESS _____

PARENT/GUARDIAN _____

HOME PHONE _____

GRADE _____

HOMEROOM _____

MY CAREER CHOICE IS:

VOCATIONAL COURSE TITLE _____

VOCATIONAL CODE (VEMIS) _____

_____
Signature of Student

CAREER OBJECTIVE

PLANS FOR GETTING STARTED IN YOUR FUTURE CAREER

My Career Choices are:

Date _____

FIRST _____

SECOND _____

THIRD _____

Describe education and experience needed for each career. Outline your plans for reaching them. Show the relationship of work experience to these careers.

WHAT IT TAKES (Experience, Education, Money, other) | PLANS FOR REACHING MY OBJECTIVES

First

SECOND

THIRD

APPENDIX C

APPENDIX C

CAREER DEVELOPMENT EDUCATION GUIDE DIFFUSION PROJECT

Richard A. Staber
Central Columbia School
District

March 14, 1974

CAREER DEVELOPMENT EDUCATION GUIDE DIFFUSION PROJECT PROPOSAL

... two million five hundred thousand young people each year graduate from high school or drop out of high school or college with no planned career and few, if any, marketable skills. It costs $28 billion to "educate"them for potential failure.

Education Briefing
U. S. Office of Education
May, 1972

... only twenty per cent of the jobs in the 1970's will require education beyond high school. Yet the Carnegie Commission on Higher Education forecast last week that two-thirds of America's high school graduates will be continuing their schooling. Already, according to the commission, nearly thirty per cent of male graduates of four-year colleges are in blue collar, sales and clerical jobs. There seems likely to be even more serious underemployment of talent in the future. In fact, the U. S. Department of Health, Education and Welfare projects that over the next decade an average of two and one-half people will be competing for every job that actually requires a college education.

Time Magazine
April 16, 1973

Such disparaging indictments on the American educational system no longer create mild uproars of taxpayer indignation. Instead, open rebellion and resentment are lodged at the collective educational enterprise when comprehensive collective bargaining packages are publicly announced or when future-oriented administrators present building programs

which presently will cost disenchanted taxpayers amounts which, in some cases, generate court injunctions instead of modern educational facilities.

Obviously, change is in order and it must come now. Fortunately, several years ago, Career Education became a main theme of the former U. S. Commissioner of Education, Sidney P. Marland, Jr. Unfortunately, because Career Education has been detained in its descent through the mills of the educational hierarchical structure, its ultimate advance into the classroom setting, where it obviously is most needed, has been stymied.

In some instances, pioneering local educators seized upon the Career Education concept and bravely entered into this new thrust with the barest of directional indicators. Now both efforts appear to be merging and, with proper acceptance, each can contribute to the metamorphic progression, which will yield a more productive, more exciting Career Education model.

The Central Columbia School District represents one of those local educational systems who entered into the Career Education movement when Career Education was in its infancy and has made some of the mistakes usually associated with the front runner. This district also has gained valuable insight and knowledge into the practicalities of the Career Education effort. With these experiences in mind, the Central Columbia School District recognizes the need for and is most appreciative of the invitation to participate as a field test school for the Pennsylvania Career Development Guide project.

Personnel from this district have eagerly awaited the announcement from the college and university levels that conceptual models were

available for field testing and anticipate an interaction yielding a mutual respect for each other and a more effective Career Education model for the students.

It is suggested that the Central Columbia Elementary Schools engage in the Pennsylvania State University Career Development Education Model Guide field testing project as developed by Dr. Edwin Herr et.al.

Proposal

District officials assessed Central Columbia's Career Education efforts and believe that the elementary faculty, consisting of five kindergarten teachers, seven first grade teachers, seven second grade teachers, seven third grade teachers and seven fourth grade teachers can most adequately contribute to and benefit from such project efforts.

The student population affected in this program is as follows:

Grade Level	Student Population
K	177
1	177
2	188
3	180
4	193

It has been established that all elementary personnel will address themselves to SELF and CAREER segments of the Pennsylvania Career Development Guide.

It is proposed that one representative from each grade level and one counselor from each building attend the CDEM workshop at Pennsylvania State University in August, 1974.

It is also proposed that five teachers attend the Human Development Workshop conducted by the Central Susquehanna Intermediate Unit.

These representatives along with Pennsylvania State University personnel will meet with the remaining Central Columbia Elementary Staff and engage in orientation and exposure to the Career Development Education Guide by grade levels.

The Pennsylvania State University personnel will share information about the development of the guide and how maximum utilization is anticipated. Central Columbia Elementary representatives will then demonstrate to their colleagues how the locally developed activities relate to the behavioral objectives and goals as stated in the guide. This workshop involvement would be conducted in October of the 1974-1975 academic year.

It is interesting to note that Super suggests that fantasy is most important in the life of the four to ten year old. (Super, 1957)

It is more interesting to note that Dr. Edwin Herr et. al. suggest in the introduction of the Career Development Education Guide that elementary students will not be "robbed" of their fantasies. It is reassuring to know that Dr. Herr suggests that young children should be allowed to be young children. Dr. Herr suggests that appropriate factual career information be incorporated into the fantasies as lived by each child and that imaginations and role playing can be stimulated by the use of the present day artifacts of the world of work.

The suggested K-12 Career Education Materials table lists the materials being considered for project inclusion and demonstrates how a continuity can be established at each of the grade levels. Among other outcomes of this effort, it is suggested that each teacher at each level of educational

preparation is aware of how his or her contribution will aid each young person in reaching that point in his life when independence is achieved.

Another outcome of this effort is the rejection or expansion of the suggested curriculum materials as outlined in the K-12 Career Education Materials guide at the elementary level. It is presently suggested that the K-3 grades develop identification games and incorporate the McKnight Series entitled, "A Highway to Work and Play" into the curriculum. Each of the gaming activities would relate to the Career Clusters as suggested by the U. S. Office of Education. Worker hats, tools and clothes could serve as springboards for awareness activities associated with the Career Education model.

Popeye characters from the King Features Career Awareness Series will be developed and used for bulletin boards and identification game purposes.

The transition from K-3 to 4th grade will be established with the use of the King Features Career Awareness Comic Books. This same series is presently found at the Middle School, thus providing continuity in the transition from elementary to middle school years.

It must be clearly understood that the development of local Career Education materials and the purchase of prepared materials is <u>suggestive</u> at this time and is subject to any major or minor change as deemed necessary by the teachers charged with the ultimate responsibility to implement the Pennsylvania Career Development Guide activities into their classrooms.

According to prior arrangements, the Central Susquehanna Intermediate Unit #16 would be responsible for project coordination and consultation services. The Central Susquehanna Intermediate Unit would also provide equipment and supply services as well as providing evaluation and dissemination functions.

Specific Project Objectives

1. Kindergarten through 4th grade teachers will develop a working knowledge of the Pennsylvania Career Development Guide.

2. Kindergarten through 4th grade teachers will infuse the SELF and CAREER segments of the Pennsylvania Career Development Guide into their existing curriculum structure.

3. Kindergarten through 4th grade teachers will develop educational materials or purchase commercially prepared materials and use such materials to implement appropriate grade level activities as suggested in the Pennsylvania Career Development Guide.

4. Kindergarten through 4th grade teachers will test the feasibility of adjusting the grade level structure of the Pennsylvania Career Development Guide, which consists of a kindergarten to 3rd grade structure, to the Central Columbia School District structure , which consists of a kindergarten through 4th grade organisational approach.

5. Kindergarten through 4th grade teachers will assess the feasibility of the Pennsylvania Career Development Guide and its implementation within the elementary levels.

6. Kindergarten through 4th grade teachers will test the feasibility

of implementing the Pennsylvania Career Development Guide using a segmented involvement approach. Specific segments implemented are the SELF AND CAREER sections of the Guide.

7. Kindergarten through 4th grade teachers will demonstrate that existing curriculums can serve as vehicles in satisfying ends which the Pennsylvania Career Development Guide proposes.

8. Kindergarten through 4th grade teachers will demonstrate that continuities of educational treatments can be achieved and transitional phases of one's educational experiences can become less traumatic when Career Education themes are easily discernible as cross grade, cross organizational maturation levels are reached.

9. Representative kindergarten through 4th grade teachers attending workshops will demonstrate that an "inoculation approach" with fellow colleagues can be achieved and used in the successful implementation of the Pennsylvania Career Development Education Guide.

PROPOSED PENNSYLVANIA CAREER DEVELOPMENT GUIDE MATERIALS

CAREER EDUCATION MATERIALS UTILIZATION SEQUENCE

CAREER AWARENESS

CAREER EXPLORATION

CAREI

K 1 2 3 4 5 6 7 8 9

A Highway to Work and Play
(McKnight Publishing Company)

It's in the Bag
Hats, Clothes, Tools
Popeye WOW Characters
(Locally Produced)

Popeye Career Comics
(King Features)

Career Cluster Packets
(C.S.I.U. #16)

Pennscript Services

Career M
(Ins

CAREER EDUCATION MATERIALS UTILIZATION SEQUENCE

ER AWARENESS

CAREER EXPLORATION

CAREER PREPARATION

2 3 4 5 6 7 8 9 10 11 12

y to Work and Play
cKnight Publishing Company)

the Bag
ts, Clothes, Tools
peye WOW Characters
ocally Produced)

Popeye Career Comics
(King Features)

Career Cluster Packets
(C.S.I.U. #16)

Pennscript Services

Career Monographs
(Institute for Research)

CAREER DEVELOPMENT GUIDE DIFFUSION PROJECT

EQUIPMENT AND SUPPLIES

2 D.U.S.O. Kits Level I	$ 200.00
2 D.U.S.O. Kits Level II	200.00
1 Peabody Language Kit #1	110.00
2 Sony Tape Recorders @ $85.00	170.00
2 S.V.E. Self concept and understandings filmstrip and cassette sets @ $110.00	220.00
12 A Highway to Work and Play Sets	384.00
10 It's in the Bag Kets	
A. Tools and equipment	400.00
B. Clothes, hats, shoes	300.00
C. Popeye figures	400.00
2 King features career awareness sets	79.00
Subtotal	2,463.00

PERSONNEL

2 Teacher interns -- MH-MR Program	$ 600.00
5 Project participants -- Human Development	950.00
6 Project Participants -- Pennsylvania State University Career Development Education Workshop	1,800.00
5 Pennsylvania State University Representatives for local in-service workshops	1,000.00
40 Substitute teachers for local in-service workshops	1,333.20
Subtotal	5,683.20
TOTAL	8,146.20

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"What the Schools Cannot Do", Time Magazine. Vol. 101, No. 16, April 16, 1973, p. 80.

Super, Donald E. et al., Vocational Development: A Framework for Research, New York: Teachers College, Columbia University, Bureau of Publications, 1957.

APPENDIX D

A FUNDING PROPOSAL

Presented to

NORTHCENTRAL PENNSYLVANIA AREA HEALTH EDUCATION SYSTEM

by

CENTRAL COLUMBIA SCHOOL DISTRICT

Submitted by:
Richard A. Staber
June 26, 1974

Introduction

For the past three years, Central Columbia School District has made a concerted effort at instituting a comprehensive career education program for the purpose of better preparing our students for the world of work. The career education program is based on the program ideas initiated by Dr. S. P. Marland, former United States Commissioner of Education. The United States Office of Education model of career education has since been adopted by the Central Columbia School District. This model consists of fifteen occupational clusters, one of which deals exclusively with health careers. It is in the expansion of our program for the "Health Career Cluster" that we request your aid.

We are living in the era of relevancy. Students strive for indications that what they are learning in school today will be applicable in the "world of work" tomorrow. The career education program is aimed at being one of the solutions to the recurring expression of student desire for relevancy.

It is in accordance with The Northcentral Pennsylvania Area Health Education System's continuing policy of consortium in generating change in the field of the health delivery system that we request your aid in establishing a curriculum in the area of medical-dental secretarial programs. This new curriculum would be a joint effort of Northcentral Pennsylvania Area Health Education System, which would provide funds for the program; Central Columbia High School, acting as middleman to provide instruction, building facilities, supplies and utilities; and high school students providing the human resource -- the potential to become the future work force of trained medical secretarial personnel.

Rationale

The creation of a medical secretarial program at Central Columbia High School basically has a two fold purpose. Our foremost objective is to benefit some of our students by providing student time within the high school experience to develop salable skills while under the guidance and direction of the business education teacher. Secondly, the program is designed to eliminate the necessity of "on the job training," which makes a significant cut into manpower efficiency. Hence with the adoption of this program, we are doing our job of preparation while our former students are doing their jobs of production in the world of work.

Although a similar program instituted by Manpower Development Training Programs (M.D.T.P.) has been unsuccessful, the new proposal was designed with attention given to a positive success factor. Rather than using the retraining approach used by M.D.T.P., which has proved faulty, Central Columbia personnel are suggesting that medical secretarial training be provided at the high school level. This is the time that students are at the appropriate vocational development stage to be most receptive to the presentation of this type of program and enthusiastic and eager to enter the world of work in the medical secretarial field.

Finally, the funding of this medical - dental secretarial program must be considered a long term investment. The program would exist in nearly the same form being presented for at least five years, thus at least ten semester courses would be given to train secretarial students for medical - dental office jobs as a direct result of this program. The teacher's salary that must be paid to offer this course is $750.00 per semester. Hence in three semesters, Central Columbia High School will have matched the original contribution in the teachers salary alone, disregarding the cost of using and maintaining the facility. This is all part of a consortium type effort.

Proposal

The Central Columbia School District proposes to enter into contract with the North Central Pennsylvania Area Health Education System to institute a medical secretarial course, which would be housed in the business education department of the high school. Specifically, the medical secretarial course would be taught to eleventh and twelfth graders who have met the required prerequisites in the said program. The prerequisites include the following: beginning typing, intermediate typing, advanced typing, employment preparation typing, office procedures, and business machines.

Program Sequence

Students wishing to enroll in the medical secretarial curriculum would follow one of the following schedules. (These are required courses in this curriculum; other courses are to be elected by students.)

First Sequence

Ninth Grade -	Business Careers and Fundamentals Beginning Typing (Semester 1) Intermediate Typing (Semester 2)
Tenth Grade -	Advanced Typing (Semester 1) Employment Preparation Typing - including medical - dental terminology course (Semester 2) Business Machines (See Appendix I)
Eleventh Grade -	Office Procedures American Medical Transcription Course (See Appendix II)

At the end of the eleventh grade and with the recommendation of the business teacher, the student completing this sequence could enter a work study program as a medical - dental secretary. If a student has not made a career-training decision early enough to start courses at the ninth grade level, the student may complete the alternate sequence. In this event, the pupil may begin his courses in the tenth grade. The same classroom courses would be taken, but the work study program in the last year would be eliminated due to lack of time.

Curriculum Design

At the present time, Central Columbia High School offers no course similar to the one being proposed. Therefore, the proposed course must be built into existing course sequences to avail students of an opportunity that is currently nonexistant. (See Appendix 3, page 4) The proposed program would become an integral part of the total career education curriculum by increasing the selection of careers for which students can decide to prepare.

Statistics show that for the academic year of 1973-1974, thirty-five students at Central Columbia High School studied general clerical courses. In addition, sixty-three more students took the secretarial-stenographic courses. This brings the total number of Central Columbia High School students who followed the business-office curriculum to ninety-eight! Surely, given the chance, some of these students would like to specialize in the medical-dental secretarial field.

What is needed to achieve this goal? Specifically, we are asking the Northcentral Pennsylvania Area Health Education System to fund the following medical career efforts:

I. The American Medical Record Association Medical-Dental Terminology Course at $190.85, which includes ten student syllabuses. (See Appendix I.)

II. The American Medical Record Association Transcription Course at $282.00, which includes ten student handbooks. (See Appendix II.)

III. Transcription machines needed for the program. (Four at $369.00) The total price for these machines is $1,476.00.

If the program is adopted, the Central Columbia High School personnel intends to "follow up" the program by doing pilot studies. Investigation through pilot studies would include the following areas:

1. Student enrollment patterns

2. Receptivity of the business education staff to include medical secretarial courses by curriculum revision.

3. Pre-test/Post-test surveys for students, consisting of medical terminology and medical records reporting procedures.

4. Ability to place students into specific medical secretarial positions (both in work study program and post graduate)

5. Employee-Employer satisfaction with the educational training received in terms of required skills needed for the specific job situation.

6. Receptivity of members in the medical profession to accept the work study students and graduates with the American Medical Record Association certificate directly from the high school situation into their offices.

BUDGET SHEET

$190.85	The American Medical Record Association Medical Terminology Course (10 student syllabuses)
$282.00	The American Medical Record Association Transcription Course
$1,476.00	Four transcription machines at $369.00 each
$1,948.85	Total expenses to finance the program

APPENDIX E

APPENDIX E

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS

SOCIAL STUDIES DEPARTMENT

INDEPENDENT STUDY FOR "WORK EXPERIENCE" STUDENTS

The Social Studies Department, after extensive departmental communications, has recognized that existing course offerings, while broad in scope and intended for and available to all students, have not taken advantage of the resources of the cooperative work experience program. Further, the reduced "in school time" of the work experience student and the compounded scheduling problems of the present curriculum encourage the development of a program which clearly relates to the work experiences of the students.

The result of these observations and needs is a unique, flexible, and individualized social science program for the cooperative work experience student.

As designed, the purposes of this program would be:

1. To provide for the application of social science theory to the actual work experience.
2. To allow curriculum flexibility for students whose work experience creates scheduling problems, and therefore, difficulty in meeting requirements for graduation.
3. To specifically apply social concepts to social circumstances, and to create an awareness and recognition of social development in non-school circumstances.
4. To experiment with direct application of general theory to specialized areas by vocationally skilled students.

In general terms the program would involve:

APPENDIX L

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS CONTINUED

1. An accurate job description to be established by the student and employer.

2. The development of a written and oral project outline.

3. The completion of course work as outlined.

4. An evaluation of these materials by the instructional staff.

Some specific suggested areas of work in the various disciplines would be:

1. (Political Science) - Define and show an understanding of the Structive and Power relationships of organization involved in employment.

2. (Sociology) - Examine the relationships with fellow workers, customers, employer (boss), etc.; designate the interdependence of the given business and / or industry with other factors in the society.

3. (Geography) - Examine the problems and systems of transportation used in marketing the products involved; indicate the effects upon the local population of its own geographical features regarding cost and availability of products needed and desired.

4. (Psychology) - Examine the pysacho-social aspects of work (sources of satisfaction and dissatisfaction, attitudes toward supervision, pay, hours, pressures, etc.) Discovering how principles of psychology are used in motivating workers, effective advertising and display, product design, etc.

5. (History) - Explore the origin of the product service and/ or organization; past influences of culture up the use and need of the product or service.

6. (Economics) - Comprehend the personal economics that allows the student-worker to experience the lifestyle desired. (Future employment opportunities, demand, investment, tax structure, personal income, expenditures, etc.)

The approach of this course is designed to cut across the various disciplines of the social sciences with a number of instructors being utilized in each student's program.

APPENDIX E

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS CONTINUED

However, because each instructor is currently carrying a full course load and such a program as outlined would, therefore, constitute additional duties for the department staff, it is the Social Studies Department's position that special vocational education funding should be made available to compensate each instructor on a per diem basis for these additional duties.

Until such funding is made available, it will be necessary to place a definite ceiling on the number of students who can participate in this program.

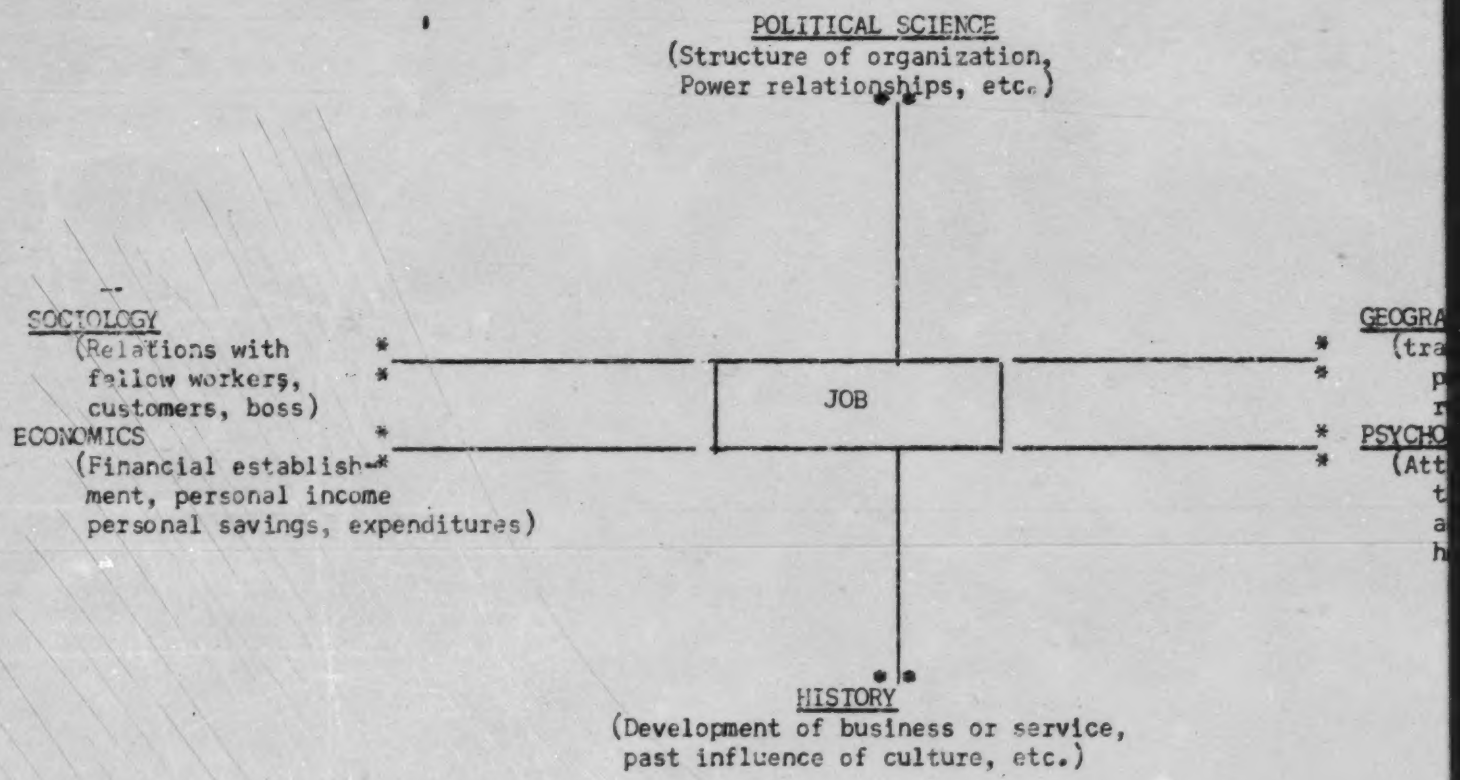
Even if funding is made available immediately, however, because of the experimental nature of the program, it will be limited in scope until adequate evaluation of its success can be made.

Students will be accepted in this program, therefore, only if the following conditions are met:

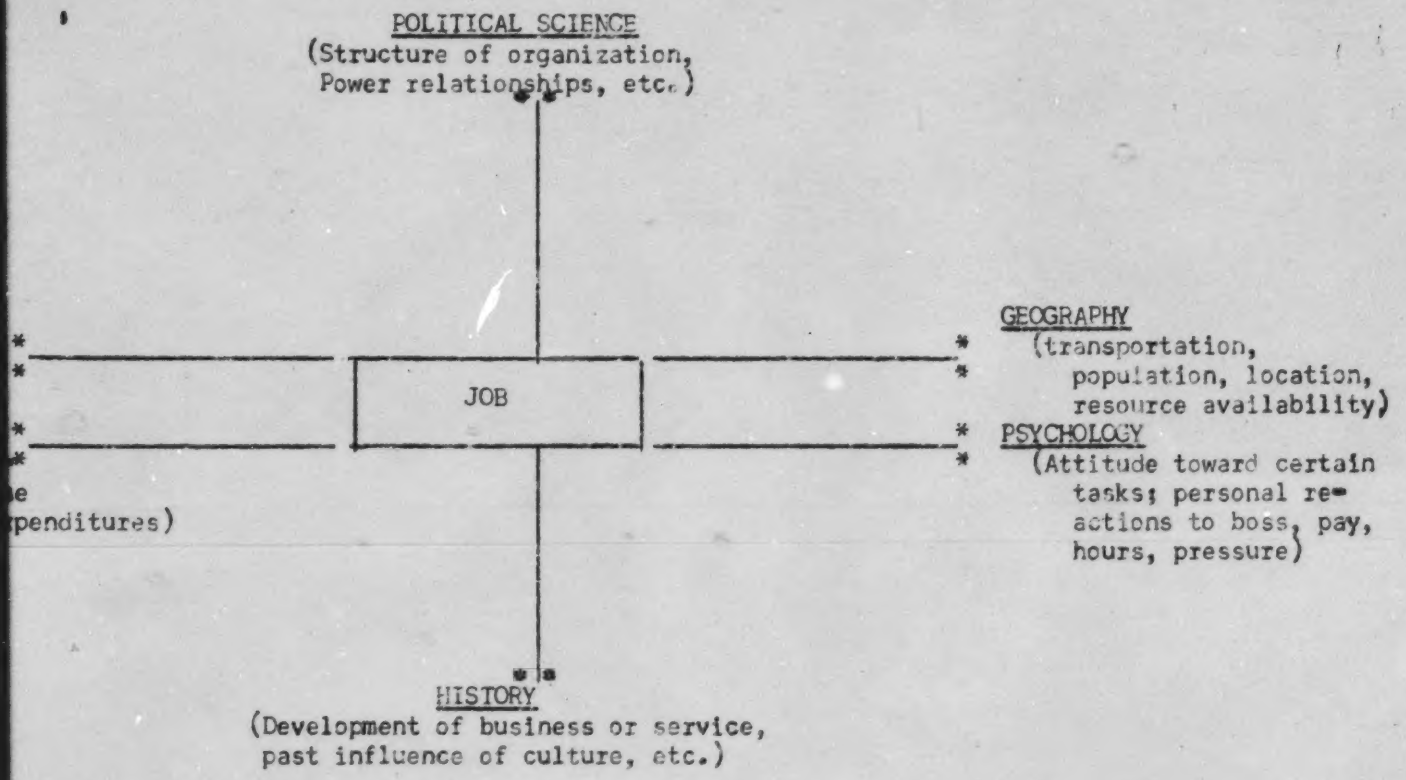
1. The student must be a part of a recognized cooperative work experience program of the school as tested in the program of studies. (These areas presently designated are: Distributive Education, Vocational-Agriculture, Home Economics, and Business Education.)

2. Approval of the supervisor of the particular work experience program is required as well as the approval of the Social Studies Department Chairman.

3. It must be shown that the student cannot, under any circumstances, be scheduled into the regular Social Studies Program in order to meet minimum requirements for graduation as listed in the Program of Studies of the Central Columbia High School.


POLITICAL SCIENCE
(Structure of organization, Power relationships, etc.)
SOCIOLOGY
(Relations with fellow workers, customers, boss)
ECONOMICS
(Financial establishment, personal income personal savings, expenditures)
JOB
GEOGRA
(tra
p
r
PSYCHO
(Att
t
a
h
HISTORY
(Development of business or service, past influence of culture, etc.)

NDENT STUDY FOR WORK EXPERIENCE STUDENTS



APPENDIX E

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS CONTINUED

SCIENCE DEPARTMENT

PHYSICAL SCIENCE II

Several trips are planned to study these problems in nature. Several labs are planned on an experimental basis.

Semester II:

I. Biocides
   A. Pandora's Panacea
   B. Biocide spectrum
   C. Persistance
   D. Non selectivity

II. Inorganic Pollutants
   A. Mercury
   B. Lead
   C. Beryllium
   D. Asbestos

III. Organics & Environment
   A. FDA
   B. Additives
   C. Contaminants

IV. Exotics
   A. Natural Introducer
   B. Man--The Introducer
   C. Extinction & The Road Back

V. Chemical & Biological Warfare
   A. Geneva Protocol
   B. Chem Arsenal
   C. Herbicidis
   D. CBW in perspective

VI. House as Environment
   A. Diversity of House & Environment
   B. Location
   C. Microclimates
   D. Urban space

VII. Transport
   A. Highways & Expressways
   B. Right of ways

APPENDIX E

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS CONTINUED

VIII. Solid Waste
- A. Today's Waste
- B. Disposal techniques
- C. New approaches

IX. People Problem
- A. Human Growth
- B. Food resources
- C. Population control
  - 1. Birth
  - 2. Abortion question
- D. Further Population & Economic growth

ENVIRONMENTAL SCIENCE

Semester I: Man & the Landscape

I. Environment and Evolution of Man

II. Man "Masters" the Environment
- A. Man -- the superpredator
- B. Domestication of land and animals
- C. Technology - dams and canals - effect on environment

III. Soil, Sand & Cycles
- A. Soil formation
- B. Soil structure - Living organisms, organic and minerals
- C. Cycles -- Nitrogen, nutrient

IV. Nature in Captivity
- A. Parks
- B. Zoos

V. Water
- A. Hydrologic cycle - use and refuse
- B. Desalinization
- C. Weather control
- D. Water pollutants
  - 1. Organic wastes
  - 2. Phosphorous
  - 3. Solutions to problems
- E. Water as Industrial coolant

APPENDIX E

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS CONTINUED

VI. Heat or thermal pollution
- A. Heat as pollution
- B. Simplification of ecosystem
- C. Cooling the coolant
- D. Thermal loading
- E. Alternative sources of power

VII. Oceans
- A. Ultimate sumps
- B. Origin of coastal features
- C. Abuse of bay
- D. Oil in water

VIII. Air
- A. Sulfur dioxide smog
- B. Photo chemical smog -- effects and control
- C. Automobile as source of pollution
- D. Carbon dioxide and climate
- E. Noise

IX. Radiation
- A. Nature of atoms
- B. Fission
- C. Fallout
- D. Radiation sickness
- E. Nuclear power and wastes
- F. Nuclear war -- prospectus

BIOLOGY COURSES

In the Biology II class, students are given a choice of any of the following topics: human ecology, zoology, animal behavior, biochemistry, microbiology, and comparative anatomy.

The courses are designed to be student-centered, so students work independently and are self-directed. Each course is self-paced. Students may use film loops, films, slides, etc. in order to better understand their specific area of study. Outside reading is one

requirement, as well as a written summary of their work and their results.

Each student is exposed to the effects that the environment has on that particular species they are studying and what is being done to improve the total situation.

All facilities of the science department are available to these students; they are encouraged to make use of this equipment as it will aid them in getting a deeper insight about the world in which they work and live.

PHYSICAL SCIENCE COURSES

In the Physical Science II course, much emphasis is placed on environment. Topics such as water ecology, smog, nuclear contamination, carbon monoxide and carbon dioxide levels, noise pollution, and population control are stressed. Each of the above areas is coupled with the effects it has on mobility of the people, industrial cities, transportation, and the "energy crisis." The effects it may have on leisure time, such as fishing, hunting, hiking, traveling, picnicking, as well as the cost placed on each individual in order to clean up our air, our streams, etc.

The above two courses are given as electives and students who have a genuine interest in these aspects of ecology are the ones who are

studying it, so that perhaps the future will be a more livable place for more people to enjoy life.

COMMUNICATION ELECTRONICS

In this course of study, students will have the opportunity to develop, via experimentation, laws governing the transmission and reception of information using the electromagnetic spectrum. Using the School District's Amateur Radio station, it will be possible for students to communicate with all parts of the world, and subsequently use this knowledge to expand his domain of life.

This course will encompass in totality all aspects of electronics, including the construction of transmitters, receivers, linear amplifiers, and antennas. Individual instruction (independent study) will provide the major mode of learning experiences.

COURSE OBJECTIVES:

1. During the course of study, each student will be able to upgrade his F. C. C. license.

2. Each student will be aware of the many opportunities and careers in the field of communication.

3. Because of the nature of the course, each student will be more aware of the interrelationships existing between the people of the world.

APPENDIX E

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS CONTINUED

ENGLISH DEPARTMENT

Course Number: 115 Suggested Grade Level: 10-11-12

Course Title: Mass Media Periods Per Week: 5

Course Length: One Semester Course Prerequisites: None

Credit Value: One-half Credit

Overview:

This course is designed for the non college-bound student. The course offers inquiry-discovery programs to help the student to understand and analyze mass media.

Course Content:

Since mass media is the delivery of a message to everybody, this course will include a study of television, radio, movies, newspapers, popular magazines, paperbacks, billboards, and comic books.

Course Objectives

The student should be able to:

1. recognize propaganda in mass media.
2. recognize campaign and advertising techniques in mass media.
3. develop a critical attitude toward mass media.
4. use the video-tape knowledgeably.
5. take pictures to suit a purpose.

Course Number: 149 Suggested Grade Level: 10-12

Course Title: Library Science I & II Periods Per Week: 5

Course Length: Two Semesters Course Prerequisites: None

Credit Value: One-half credit per semester

APPENDIX E

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS CONTINUED

Overview:

Library science is designed to give student librarians an opportunity to broaden their personal experiences, to become more adept in the use of books and non-book materials, to become leaders, to develop special abilities, and skills, and to stimulate reading interests. This course helps to promote interest in library science as a profession, and serves as a means of improving the library services of the school and community.

Course Content:

The program is designed to teach:

1. circulation services
2. shelving services
3. reading room services
4. reserve materials
5. book processing services
6. magazine and newspaper services
7. information file services
8. audiovisual services
9. repair book and materials services
10. reference services
11. general clerical services
12. cataloging and order services
13. taking inventory
14. book reviewing

APPENDIX E

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS CONTINUED

Course Objectives: As a result of this training in library science, the student librarians should be able:

1. to perform all circulation services at the charging desk in the library.

2. to shelve and know the arrangement of all library materials.

3. to do library displays and library bulletin boards.

4. to assist with the processing of new library materials.

5. to acquaint students and faculty members with various phases of library materials.

6. to assist with periodicals, newspapers, information file, and audiovisual materials.

7. to repair library materials.

8. to perform general clerical services.

9. to file and arrange all types of library cards and materials.

10. to be a good public relations agency for the school and community.

11. to take directions and follow them.

12. to help other students locate materials and books.

13. to summarize and give a critical analysis of a book.

APPENDIX E

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS CONTINUED

MATHEMATICS DEPARTMENT

Career Education has been a priority here at Central Columbia High school for a good three years now. The Mathematics Department has done its utmost to cooperate by revamping courses and developing new courses.

In line with this, we have decided to change Fundamentals of Mathematics to a semester course and to add another semester called Industrial Mathematics. Consumer Mathematics will also be separated into two semester courses instead of a full year course. Students will have the option of taking any of these four courses in any order they so desire.

The department hopes that this will create more flexibility in the planning of schedules for vocational students.

A description of each course is attached.

Course Number: 209 Suggested Grade Level: 10,11

Course Title: Fundamentals of Mathematics Periods Per Week: 5

Course Length: One semester

Prerequisites: None

Credit Value: One-half credit

Overview:

Fundamental mathematics is offered to the student not taking the advanced mathematics sequence. Any student taking, or who has taken, Algebra II will be excluded from this course. Many phases of mathematics which are useful in everyday situations will be considered.

APPENDIX E

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS CONTINUED

This course is well suited for the student with non-academic interests.

Course Content:

1. Arithmetic review (whole numbers, fractions, and decimals.)
2. Geometric figures (plane figures, polyhedrons.)
3. Systems of measurement (U. S. customary system, metric.)
4. Percentage (percent, interest, discount.)
5. Statistics (interpreting tables and graphs.)

Course Objectives: As a result of his learning experiences, the student will be able to:

1. add, subtract, multiply and divide whole numbers, fractions, and decimals.
2. draw and construct figures (with protractor, compass and straight edge.)
3. convert measures in the U. S. system to the metric.
4. solve the three types of percentage problems and apply them.
5. read statistical graphs and tables.

Course Number: 217 Suggested Grade Level: 10,11

Course Title: Industrial Mathematics Periods Per Week: 5

Credit Value: One - half Credit Prerequisite: None

Course Length: One Semester

Overview:

Industrial mathematics is offered to the student not taking the advanced mathematics sequence. Any student taking, or who has taken, Algebra II will be excluded from this course. Mathematics found in industrial and other vocational situations will be considered. This course is well suited for the student with non-academic interests.

APPENDIX E

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS CONTINUED

Course Content:

1. Measurement (linear and argle measure).
2. Geometric formulas (plane and solid figures).
3. Formulas for industry (lumber, automobile).
4. Geometric constructions (lines, angles, triangles).
5. Ratio and proportion (meaning of, similarity).
6. Trigonometry (properties of right angles).

Course Objectives: As a result of his learning experiences, the student will be able to:

1. Compute measurements of area, volume, weight, and temperature.
2. Solve industrial formulas and round off results.
3. Make use of mathematics constructions in solving problems.
4. Solve problems using ratio and proportion.
5. Solve problems using the mathematics of the right triangle.

Course Number: 206 Suggested Grade Level: 11, 12

Course Title: Consumer Mathematics I Periods Per Week: 5

Course Length: One semester Prerequisites: None

Credit Value: One-half Credit

Overview

Consumer Mathematics I is a valuable course for every senior student. The purpose of this course is to make each student a more intelligent consumer by teaching him how to carefully analyze consumer problems. Topics to be covered include: transportation, clothing, income, and budgets, consumer credit, and insurance.

APPENDIX E

CAREER EDUCATION DEPARTMENTAL COURSE PROPOSALS CONTINUED

Course Objectives: At the end of the semester, the student will be able to:

1. interpret statistical information concerning the topics to be covered in the course.

2. analyze all aspects of the various means of transportation and compute costs involved.

3. compare and compute clothing costs.

4. compute income and plan a budget.

5. compute and compare the various types of consumer credit.

6. describe, evaluate, and interpret various types of insurance and compute the costs of each.

Course Number: 218 Suggested Grade Level: 11, 12

Course Title: Consumer Mathematics II Periods Per Week: 5

Course Length: One Semester Prerequisite: None

Credit Value: One-half Credit

Overview

Consumer Mathematics II is offered as a continuation of Consumer Mathematics I. The purpose of this course is to broaden the students' comprehension of topics, not discussed in the first semester, pertinent to the consumer. Those topics to be included are: food, housing, taxation, banking, and investments.

Course Objectives: At the end of the semester the student will be able to:

1. compute and compare food prices.

2. compute and compare housing costs.

3. compute and interpret taxes.

4. compute the cost of banking services.

5. distinguish between various types of investments, and compute costs and profits of same.

APPENDIX F

APPENDIX F

Project SPROUT
(Systematic Program for the Remediation
Of Underchallenged Teenagers)

A Dropout Training Program
Proposal Presented to

County Commissioners
Union County Courthouse
Lewisburg, Pennsylvania
10 May 1974

Central Susquehanna Intermediate Unit
Division of Research, Planning, and Evaluation
John E. Lutz

P.O. Box 213
Lewisburg, Pennsylvania 17837

MOTIVATION AND INCENTIVE SUBSYSTEM

A. Staff Training

1. Establish Industrial Advisory Committee (IAC) to advise on specific training-employment matters.
   a. Identify significant industry, labor, government groups operating in the community.
   b. Recruit representatives from identified groups so that they know the sincerity, stability, and clarity of purpose of the program.
   c. Establish curriculum content, development of employment opportunities, determining industry employment trends and requirements, obtaining free or reduced cost materials and equipment, and the development of new training programs for drop-outs and potential drop-outs as areas for advisement of the IAC.
   d. Give IAC members a chance to see training sites in action.

2. Recruit Work Supervisors (WS)
   a. Identify competencies necessary and prepare job description.
   b. Include "teaching ability" and "technical competence" as the two most important qualities of the WS, and "program commitment" and "employer contacts" as two other important qualities.
   c. Assign trainees to Work Supervisors who really want to work with them. Adjust staff work load if necessary.
   d. Reward Work Supervisors for their extra responsibilities.
   e. Supervise or provide a detailed training curriculum for the Work Supervisor.
   f. Screen applicants for Work Supervisor positions by asking detailed information related to the field in which he will instruct.
   g. Develop daily "responsibility" sheets for new Work Supervisors.
   h. Give the Work Supervisor technical assistance to develop a curriculum.
   i. Hold inter- or intra-agency meetings of Work Supervisors to discuss curriculum development and the solution of common problems.
   j. Hold inter-disciplinary meetings so that conflict over client responsibility does not arise.

3. Recruit Career Development Specialist (CDS)
   a. Identify competencies necessary and prepare job description.
   b. Include "career development training competence" and "teaching ability" as the two most important qualities of the CDS, and "program commitment" and "understanding" as two other important qualities.
   c. Stipulate precise job required behavioral skills, and train for those behaviors.
   d. Train CDS to intervene more directly in the participant's home and familial problems.
   e. Station CDS's at training sites.
   f. Supervise both CDS's and WS's with a single supervisor.
   g. Break down long-term career development goals into a series of short-term achievable goals.
   h. Continuously assess the participant's skills development.
   i. Begin follow-up immediately after placement on the job and continue at regular intervals.

B. Participant Training

1. Establish appropriate instructional models.
   a. Implement direct reinforcement procedures (operant conditioning) that will reward participants at appropriately designed intervals for appropriately solicited behaviors.
   b. Move to contingency contracting (where rewards, typically tokens, are given contingent on specified behaviors) as behaviors and attitudes become established through direct reinforcement.
   c. Move on to social modeling (learning through imitations) as behaviors and attitudes become better established through contingency contracting.

2. Implement existing instructional materials.
   a. Use Occupational Essentials, a program available from the H.C. Johnson Press which is designed to develop skills and attitudes for employment.
   b. Use the Human Development Program, a program which is designed to develop skills and attitudes for interpersonal relations.
   c. Integrate instructional and work programs and provide payment for each.
   d. Design programs to give participants a sense of increasing academic competence and practical relevance.
   e. Keep instructional groups between six and fifteen members in size.
   f. Identify goals of instructional program in specific terms and link them to vocational goals.

C. Objectives

1. Persons selected to serve as Work Supervisors and Career Development Specialists, after completing the staff training program, will be able to adequately meet the needs of youngsters who have dropped out of school, as determined by a high retention rate of the program (at least 70%) and satisfaction of program participants, trained staff, and outside observers.

2. Youngsters participating in the programs will demonstrate a more positive self-appraisal (or self-concept), as measured by instruments such as the Career Maturity Inventory Competence Test, Part I: Knowing Yourself, or the Coopersmith Self-Esteem Inventory.

3. Youngsters participating in the program will demonstrate an increased motivation toward career development and toward work, as determined by an increase in the number of requests for further vocational or career development training.

4. Youngsters participating in the program will demonstrate more consistent and appropriate career aspirations in terms of their self-awareness and personal development, as determined by appropriately designed assessment techniques and instruments.

CAREER AND CONSUMER MANAGEMENT SUBSYSTEM

A. Recruitment, orientation, and assessment of participants.

1. The following five criteria will be used to select participants for the program:

   a. A drop-out who has younger siblings
   b. A drop-out who has high academic skill or training potential
   c. A drop-out who is unemployed
   d. A drop-out who is or will become a parent
   e. A drop-out who is between the ages of 16 and 19.

2. Each participant will be assessed relative to his potentials, interests, attitudes, and achievements. An individualized program will be developed which will account for these particular participant characteristics.

B. Educational Program

1. This program will consist of two phases: one phase consisting of part-time work and the second phase consisting of part-time instruction. Each participant will be paid an hourly wage, with bonuses given as part of the direct reinforcement training program.

2. The instructional program will consist of three instructional models.
   a. For approximately the first month, depending upon the individual's needs, a participant will be involved with instruction on a direct reinforcement schedule where payments will be made as part of the reward structure. During this time, the program will address each participant's state of readiness and will deal with basic job preparation tasks.

   b. During the second and third months, again, dependent upon need, the instructional model used will be contingency contracting. The emphasis of the program during these two months will be to promote adequate self-concept through the Human Development Program and the identification, examination and reflection of the participants' value system and other related occupational tasks through the Singer Job Survival Skills Program.

   c. From about the fourth month to the conclusion of the program, the instructional model will consist of a variable mix of direct reinforcement,contingency contracting, and social modeling. The program will also deal with consumer concerns, money management, and legal rights and responsibilities. The participants will be directed into one of three areas during this part of the program:

1. Schooling, with options for GED or attending high school, arranging for attendance at a local community college, or arranging for attendance at a local trade school.

2. Training on-the-job for the participant, with options for GED, an apprenticeship arrangement, or specific skill or trade development activities.

3. Direct employment in a job where the participant will have options of the GED or an unskilled or a semi-skilled job.

3. The work experience phase is that part of the program in which the participant is in a productive work situation as distinguished from formal training and informal instruction.

   a. opportunities in the work experience program may lead to more advanced steps.
   b. The work experience program amy offer possible future employment at the work site.
   c. This program can offer a means of rounding out a participant's preparation for work.
   d. The work program can offer an understanding of the disciplines of working.

4. A labor market information system will be established using the expertise of the Bureau of Employment Security, local employers, local labor, parents, and a placement counselor or a cooperative education work study coordinator from a local district. The system will operate using existing VIEW materials and the facilities of the retrieval system of the Bureau of Employment Security to maintain an up-to-date listing of the occupations and current needs.

5. Since the total program is planned upon an employer-based model, training sites should be made available at each work site so that the instructional program can be dealt with at or near the work site. In this way, participants can see a more direct relationship of what they are doing in the instructional situation to what they will be doing in the work situation.

6. The program will use exisitng placement resources and implement cooperative placement activities with existing school, community and government agencies.

D. <u>Objectives</u>

1. Participating youngsters will demonstrate an increased knowledge of occupational information related to job duties and tasks, as measured by such instruments as the Career Maturity Inventory Competency Test, Part 2: Knowing About Jobs.

2. Coordination and use of existing school, community, and government resources for the education, training, and placement of participating youngsters will be increased, as determined by use of the personnel and facilities of agencies such as the Department of Public Assistance, the Interagency Council, the Department of Child Welfare, the Bureau

Employment Security, the Susquehanna Personnel Managers Association, Chambers of Commerce, local businesses and industries, and local schools.

3. Participating youngsters will be successfully placed in jobs for which they were trained or in post-secondary occupational education and training programs, as determined by structured interviews, indications of "post-program" satisfaction, and comparisons of where placed to how trained.

4. Participating youngsters, after successful completion of the program, will improve career and occupational interests and capabilities, practice career preparation activities, promote adequate self-concepts, identify, examine and reflect on their own value system, and become more aware of themselves as consumers and money managers, as determined by appropriate assessment techniques and instruments.

5. School personnel will demonstrate greater interest and concern for the evolving career development of academically and socio-economically handicapped students (potential and actual drop-outs) as determined by a continuation or modification of the use of the Work Supervisor or Career Development Specialist, or appropriate curricular adaptations or revisions for a more realistic educational experience for these students and a more realistic home/school experience for their families.

EVALUATION SUBSYSTEM

A. Participant progress

1. Evaluation of affective dimensions.
   a. Assessments will be made to determine the change in self-concept, self-awareness attitudes toward work, and career aspirations of each participant in the program.

2. Evaluation of skill development.
   a. Assessments will be made of both job related and consumer related skills.

3. Evaluation of cognitive development.
   a. Assessments will be made of knowledges held by participants as related to both the affective and a skill domains.

B. Staff training

1. Evaluation of affective dimensions.
   a. Assessments will be made of staff attitudes toward the drop-out and his family, and the program in general.

2. Evaluation of skill development.
   a. Assessments will be made of supervisory and career advisory skills of staff.

C. Cost efficiency

1. Of primary concern in this aspect of evaluation will be the program costs per participant.

2. Assessments will be made to determine whether the same results could be made with less money.

3. Assessments will be made to determine whether or not better results could be made with the same amount of money.

D. Goals

1. Determine the extent to which the objectives of the project have been accomplished.

2. Determine what factors either enable or precluded the accomplishment of these objectives.

3. Promote the inclusion of the successful aspects of the project into ongoing drop-out training programs.

APPENDIX G

APPENDIX G

CENTRAL COLUMBIA HIGH SCHOOL
4777 Old Berwick Road
Bloomsburg, PA 17815

CENTRAL COLUMBIA HIGH SCHOOL GRADUATE FOLLOW-UP CAREER SURVEY

A. YOUR PRESENT STATUS 1. PLEASE MARK YOUR PRESENT STATUS. MARK ONLY ONE BOX PER COLUMN AS IT APPLIES TO YOU. THANK YOU.	WORK BOUND STUDENT RESPONSES
Employed full time	33
Employed part time	5
Unemployed, looking for work	0
Unemployed, not looking for work	0
Military service	3
Homemaker, full time	0
Status other than above	0
College, full time	37
College, part time	1
School (Not college), full time	1
School (Not college), part time	0
B. FOR EMPLOYED AND UNEMPLOYED 2. WERE YOU A CO-OP STUDENT (PART TIME SCHOOL AND PART TIME ON JOB TRAINING) DURING LAST YEAR IN H. S.?	
YES *GO TO Q. 3	YES 22
NO *SKIP TO Q. 4	No 17
3. DID YOU CONTINUE EMPLOYMENT WITH YOUR CO-OP AFTER H. S. ?	
YES	YES 16
NO	NO 6
4. UPON LEAVING H. S., DID YOU WANT EMPLOYMENT IN YOUR FIELD OF OCCUPATIONAL STUDY?	
YES	YES 29
NO	NO 8
NO ANSWER	NO ANS. 3
5. WHAT METHODS DID YOU TRY TO GET YOUR FIRST FULL TIME JOB AFTER H. S. (PLEASE MARK ALL METHODS USED)	
Wrote letters to employers	1
Answered help wanted ads	6
Phoned companies for job	4
Tried state employment agency	5
Tried private employment agencies	0
Got leads from Counselor	4
Got leads from friends/relatives	9
Got leads from vocational teachers	7
Placed ad in newspaper	0
Got leads from school placement	2
Asked for job in person	11

Other Methods (Explain)

Three students knew the employer
Three students had their jobs prior to graduation

APPENDIX G

CENTRAL COLUMBIA HIGH SCHOOL GRADUATE FOLLOW-UP CAREER SURVEY CONTINUED

6. DID YOUR SCHOOL GIVE GUIDANCE IN HOW TO GET A JOB? (MARK ALL THAT APPLY)	WORK BOUND STUDENT RESPONSES
Employment interview	20
Employment application form	14
Social Security application	5
About state employment agency	5
About private employment agencies	1
Answering want ads	5
About Civil Service jobs	6
List of employers to contact	3
No Answer	10
Other	1
7. HOW MANY FULL TIME JOBS HAVE YOU HAD SINCE FINISHING H. S. ?	
None	2
One	28
Two	9
Three	0
More than three	0
8. DID YOU HAVE YOUR FIRST FULL TIME JOB LINED (ARRANGED FOR) BEFORE LEAVING H. S. ?	
Yes	Yes 26
No	No 11
No Answer	No Ans. 2
9. HOW MANY WEEKS AFTER HIGH SCHOOL DID YOU START YOUR FIRST JOB?	
0 0 If less than 10, weeks, circle 0 plus the number. For example, three (3) weeks would be circled as 03 (see example). Circle 00 if you started a job a few days after completion of high school.	0-20 15- 1 1- 3 19- 1 2- 2 28- 1 3- 1 23- 1 4- 1 5- 0 No Ans.-7 6- 1
1 1	
2 2	
3 3	
4 4	
5 5	
6 6	
7 7	
8 8	
9 9	
10. HOW WELL DID YOUR H. S. COURSES PREPARE YOU FOR YOUR PRESENT JOB OR EDUCATIONAL PROGRAM?	
Excellent preparation	6
Good preparation	17
Preparation only fair	10
Poor Preparation	5
No Answer	1

Example
00
11
22
33
44

APPENDIX G

CENTRAL COLUMBIA HIGH SCHOOL GRADUATE FOLLOW-UP CAREER SURVEY CONTINUED

PLEASE RESPOND TO 18 WEEK SEMESTER COURSES	
1. Very acceptable 2. Somewhat acceptable 3. No noticeab le difference 4. Somewhat ineffective 5. Entirely ineffective	1 - 26 4 - 0 2 - 7 5 - 1 3 - 1 No Ans 4
WHAT ADDITIONAL COURSES DO YOU FEEL WOULD BE HELPFUL IN PREPARING YOU FOR YOUR PRESENT OCCUPATION OR EDUCATIONAL PROGRAM ?	
Electronics Sales Industrial Engineering Medical Courses More business and human relations Heavy equipment operation	Study skills and note taking Advanced data processing Business law & legal information Mechanics Communication with elders Foundation laying
I FEEL THAT THE FOLLOWING EFFORTS WOULD HAVE MORE ADEQUATELY PREPARED ME FOR MY PRESENT OCCUPATION OR EDUCATIONAL PROGRAM.	
Better Career Education School working closer with local industry More social skills More information about specific jobs Better advice	
PLEASE CHECK YOUR CURRICULUM MAJOR.	
Business Education	16
Distributive Education	9
Home Economics	0
Agriculture	4
Business Administration	2
General	1
Academic	3
No Answer	3
DID YOU USUALLY GET YOUR "FIRST CHOICE" COURSE ?	
Yes	36
No	1
No Answer	2
Please LIST THOSE COURSES OR ACTIVITIES YOU FEEL WERE OF LEAST VALUE TO YOU.	
Shop Biology World Cultures Ghost and Horror Tales Career Education History (5 responses) Required English Required Math Geography Geometry	Science Health (2) Art (2) Music (2) Gym Social Studies Algebra Journalism Novels Five students responded that all their courses had been beneficial.

APPENDIX G

CENTRAL COLUMBIA HIGH SCHOOL GRADUATE FOLLOW-UP CAREER SURVEY CONTINUED

11. WHAT KIND OF A JOB DO YOU HAVE?

Deleveries
Flight Facilities and Equipment Representative
Bookkeeper
Equipment operator
Electronic technician
Military
Warehouse worker (3)
Clerk typist (2)
Sheet Metal Worker
Clerk (2)
Hospital Orderly
Manager (2)
Machine Operator
Secretary (6)
Bulldozer Operator
Produce clerk
Waitress
Dairy Farm Worker
Mason
Mechanic
Groom (For Race Horses)
Carpenter
Dishwasher
Scheduler-Assistant
Assembler & Inspector
Bank Teller
Block Layer

WHAT IS YOUR PRESENT HOURLY RATE (BEFORE DEDUCTIONS)	
$1.00 - $1.49	2
$1.50 - $1.99	3
$2.00 - $2.49	14
$2.50 - $2.99	7
$3.00 - $3.49	5
$3.50 - $3.99	3
$4.00 and over	1
Not Applicable	3
No Answer	1

12. HOW RELATED IS YOUR PRESENT JOB TO YOUR H. S. OCCUPATIONAL COURSE?	
Same Occupation Studied (Skip to quest. 14)	4
Highly Related	8
Only Slightly Related	17
Completely Unrelated	7
No Answer	3

13. WHAT WAS THE MAIN REASON FOR NOT GETTING PRESENT JOB IN FIELD OF STUDY?(PLEASE MARK ONLY ONE ANSWER)	
Never planned to work in that field	2
Tried, but couldn't find job in field	1
Did not feel that I learned enough	3
Discovered pay was too low	3
Decided I did not like type work	2

APPENDIX G

CENTRAL COLUMBIA HIGH SCHOOL GRADUATE FOLLOW-UP CAREER SURVEY CONTINUED

	WORK BOUND STUDENT RESPONSES
Too little opportunity for advancement	0
Decided I did not like working conditions	0
Better type of opportunity came along	5
Not accepted in apprentice program	0
Other Reason (below)	5
Went to work in family business	
Married (3)	
Too much hassle	
No Answer	16
14. WHAT ANSWER BEST TELLS HOW YOU GOT YOUR FIRST JOB AFTER HIGH SCHOOL?	
Through school co-op program	11
Through vocational teacher	2
Through school counselor	1
Through school placement office	3
Through other school personnel	1
Private employment agency	0
State employment agency	2
Through parent or relative	8
Through family or personal friend	8
On my own, without anyone's help	8
Other	
WANT AD	1
No Answer	1

C. FOR THOSE IN COLLEGE OR SCHOOL

15. WHAT TYPE COLLEGE OR SCHOOL ARE YOU NOW ATTENDING?	COLLEGE BOUND STUDENT RESPONSES
Community College	0
Private 2 year College	0
State College, Branch Campus	7
State College, Main Campus	25
Private 4 year College	6
Private Business School	0
Private Technical School (Military)	1
Area Vo-Tech School	0
Other	
Nursing School	2
PRIVATE 3 year Bible training School	1
16. IS YOUR SCHOOL IN STATE OR OUT OF STATE?	
IN STATE	36
OUT OF STATE	6

APPENDIX G

CENTRAL COLUMBIA HIGH SCHOOL GRADUATE FOLLOW-UP CAREER SURVEY CONTINUED

17. DO YOU LIVE AT HOME OR AT SCHOOL?	
At home	19
At school	23
18. ARE YOUR PRESENT STUDIES RELATED TO YOUR H. S. OCCUPATIONAL COURSES?	
Related	29
Unrelated	9
No Answer	4

APPENDIX H

APPENDIX-H

CENTRAL COLUMBIA HIGH SCHOOL 1973-1974 ACADEMIC YEAR

VOCATIONAL COURSE ENROLLMENT BY GRADE AND SEX

	GRADE 9						GRADE 10						GRADE 11						GRADE 12					
	YOUNG MEN			YOUNG WOMEN			YOUNG MEN			YOUNG WOMEN			YOUNG MEN			YOUNG WOMEN			YOUNG MEN			YOUN		
	Vocational Subjects	Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage
	0	11	10	0	14	15	0	10	13	0	26	28	0	8	8	0	18	19	0	15	21	0		
	1	26	23	1	36	40	1	22	28	1	20	22	1	9	13	1	16	17	1	9	13	1		
	2	27	24	2	28	31	2	20	26	2	19	20	2	10	14	2	16	17	2	21	30	2		
	3	29	26	3	12	13	3	13	17	3	13	14	3	15	21	3	12	13	3	17	24	3		
	4	15	14	4	1	1	4	8	10	4	8	9	4	9	13	4	8	9	4	2	3	4		
	5	3	3	5	—	—	5	5	6	5	4	4	5	12	17	5	11	12	5	2	3	5		
	6	—	—	6	—	—	6	—	—	6	—	—	6	8	11	6	8	9	6	3	4	6		
	7	—	—	7	—	—	7	—	—	7	2	2	7	—	—	7	4	4	7	1	1	7		
	8	—	—	8	—	—	8	—	—	8	1	1	8	2	3	8	—	—	8	—	—	8		
	9	—	—	9	—	—	9	—	—	9	—	—	9	—	—	9	—	—	9	—	—	9		
	10	—	—	10	—	—	10	—	—	10	—	—	10	—	—	10	—	—	10	—	—	10		
Student Total		100			100			88			92			77			88			86				
Ave. Number of Voc. Courses		2.43			2.29			2.71			2.85			3.61			3.47			3.52			4.	

APPENDIX-H

CENTRAL COLUMBIA HIGH SCHOOL 1973-1974 ACADEMIC YEAR

VOCATIONAL COURSE ENROLLMENT BY GRADE AND SEX

GRADE 10									GRADE 11						GRADE 12					
NG WOMEN			YOUNG MEN			YOUNG WOMEN			YOUNG MEN			YOUNG WOMEN			YOUNG MEN			YOUNG WOMEN		
Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage	Vocational Subjects	Number of Students	Percentage	TOTAL PERCENTAGE
14	15	0	10	13	0	26	28	0	6	8	0	18	19	0	15	21	0	12	14	16
36	40	1	22	28	1	20	22	1	9	13	1	16	17	1	9	13	1	11	12	21
28	31	2	20	26	2	19	20	2	10	14	2	16	17	2	21	30	2	21	24	23
12	13	3	13	17	3	13	14	3	15	21	3	12	13	3	17	24	3	12	14	18
1	1	4	8	10	4	8	9	4	9	13	4	8	9	4	2	3	4	11	12	9
—	—	5	5	6	5	4	4	5	12	17	5	11	12	5	2	3	5	12	14	7
—	—	6	—	—	6	—	—	6	8	11	6	8	9	6	3	4	6	3	3	3
—	—	7	—	—	7	2	2	7	—	—	7	4	4	7	1	1	7	2	2	1
—	—	8	—	—	8	1	1	8	2	3	8	—	—	8	—	—	8	4	5	1
—	—	9	—	—	9	—	—	9	—	—	9	—	—	9	—	—	9	—	—	—
—	—	10	—	—	10	—	—	10	—	—	10	—	—	10	—	—	10	—	—	—
100			88			92			77			88			86			72		
2.29			2.71			2.85			3.61			3.47			3.52			4.05		

APPENDIX I

APPENDIX I

CENTRAL COLUMBIA HIGH SCHOOL 1973-1974 ACADEMIC YEAR

VOCATIONAL DEPARTMENT MIX PATTERNS BY GRADE AND SEX

	GRADE 9						GRADE 10						GRADE 11						GRADE 12					
	YOUNG MEN			YOUNG WOMEN			YOUNG MEN			YOUNG WOMEN			YOUNG MEN			YOUNG WOMEN			YOUNG MEN			YOUNG	
	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of
	0	7	6	0	8	10	0	10	12	0	22	25	0	8	10	0	16	18	0	13	18	0	8
	1	51	45	1	54	65	1	39	46	1	58	66	1	24	30	1	49	56	1	16	23	1	31
	2	41	36	2	21	25	2	30	35	2	8	9	2	26	32	2	18	21	2	24	34	2	28
	3	14	12	3	—	—	3	6	7	3	—	—	3	19	23	3	4	5	3	14	20	3	19
	4	—	—	4	—	—	4	—	—	4	—	—	4	3	4	4	—	—	4	3	4	4	—
	5	—	—	5	—	—	5	—	—	5	—	—	5	1	1	5	—	—	5	1	1	5	—
	6	—	—	6	—	—	6	—	—	6	—	—	6	—	—	6	—	—	6	—	—	6	—
Student Total		113			83			85			88			81			87			71			8
TOTAL	694																						

APPENDIX I

CENTRAL COLUMBIA HIGH SCHOOL 1973-1974 ACADEMIC YEAR

VOCATIONAL DEPARTMENT MIX PATTERNS BY GRADE AND SEX

GRADE 10										GRADE 11										GRADE 12									
OMEN	YOUNG MEN			YOUNG WOMEN			YOUNG MEN			YOUNG WOMEN			YOUNG MEN			YOUNG WOMEN												
Percentage	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of Students	Percentage	Vocational Departments	Number of Students	Percentage	TOTAL PERCENTAGE
10	0	10	12	0	22	25	0	8	10	0	16	18	0	13	18	0	8	9	13
65	1	39	46	1	58	66	1	24	30	1	49	56	1	16	23	1	31	36	46
25	2	30	35	2	8	9	2	26	32	2	18	21	2	24	34	2	28	33	28
—	3	6	7	3	—	—	3	19	23	3	4	5	3	14	20	3	19	22	11
—	4	—	—	4	—	—	4	3	4	4	—	—	4	3	4	4	—	—	1
—	5	—	—	5	—	—	5	1	1	5	—	—	5	1	1	5	—	—	.3
—	6	—	—	6	—	—	6	—	—	6	—	—	6	—	—	6	—	—	0
		85			88			81			87			71			86		

ACCESSION NUMBER: VT102303

PUBLICATION DATE: 09JUN75

TITLE: VOCATIONAL IN-SERVICE FOR SECONDARY COUNSELORS. FINAL REPORT.

PERSONAL AUTHOR: CHARLTON, ELIZABETH

DESCRIPTOR: *VOCATIONAL COUNSELING; *SECONDARY SCHOOL COUNSELORS; *INSERVICE PROGRAMS; STAFF IMPROVEMENT; *COUNSELOR ATTITUDES; *ATTITUDE TESTS; PROGRAM EVALUATION; PROGRAM DESCRIPTIONS

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 38P.

ABSTRACT: THIS PROJECT REPORT DESCRIBES A STAFF DEVELOPMENT PROGRAM IN THE YORK COUNTY PUBLIC SCHOOLS, VIRGINIA, DESIGNED TO IMPROVE SECONDARY SCHOOL COUNSELOR ATTITUDE AND KNOWLEDGE IN VOCATIONAL AREAS AND TO MEASURE CARRY-OVER TO STUDENTS IN TERMS OF ENROLLMENT REQUESTS. BASED ON THE SUPPOSITION THAT COUNSELORS DIRECT MORE EFFORT TO COLLEGE-BOUND STUDENTS AT THE EXPENSE OF NONCOLLEGE-BOUND, THE PROJECT WAS SET UP TO INCREASE COUNSELOR AWARENESS OF TRENDS IN VOCATIONAL EDUCATION AND OF COMMUNITY NEEDS, AND TO IMPROVE SKILLS IN COUNSELING STUDENTS IN VOCATIONAL PROGRAMS. THE PROGRAM INVOLVED BOTH INSTRUCTION AND FIRSTHAND EXPERIENCE. A PRETEST AND POSTTEST ATTITUDE SCALE, ADMINISTERED TO COUNSELORS, INDICATED A MORE POSITIVE ATTITUDE TOWARD NONCOLLEGE-BOUND STUDENTS. ALSO, ENROLLMENT REQUESTS FOR VOCATIONAL COURSES WERE FOUR PERCENT HIGHER THAN IN THE YEAR PRECEDING THE PROGRAM. (NJ)

INSTITUTION NAME: YORK COUNTY PUBLIC SCHOOLS, YORKTOWN, VA.

SPONSORING AGENCY NAME: VIRGINIA STATE DEPT. OF EDUCATION, RICHMOND. DIV. OF VOCATIONAL EDUCATION.; BUREAU OF OCCUPATIONAL AND ADULT EDUCATION (DHEW/OE), WASHINGTON, D.C.

VT 102 303

FINAL REPORT

VOCATIONAL IN-SERVICE FOR SECONDARY COUNSELORS

Conducted Under
Part C of Public Law 90-576

Elizabeth Charlton
Secondary Supervisor
887-2611

York County Public Schools

Division of Vocational Education
Virginia State Board of Education
Richmond, Virginia 23216

June 9, 1975

VT 102 303

ABSTRACT

The Standards of Quality state that 90% of the graduates not furthering their education will be prepared for the world of work. The York County counselors had been accused of supporting the college-bound students more than the students preparing to enter the job market immediately upon graduation.

All intermediate and senior high school counselors took part in a staff development program entailing both instruction and first hand experiences in the State Department of Education defined vocational areas.

Attitude scales administered to the counselors indicated a positive reaction to areas of priority of student needs, educational and vocational education plans.

Enrollment requests for vocational courses is 4% higher for 1975-76 than during 1974-75. Enrollment request figures are up in pre-vocational areas and first year programs, thus allowing further development of job entry skills.

Vocational In-Service for
Secondary Guidance Counselors

INTRODUCTION

At a school board meeting prior to March 19, 1974, noticeable criticism was voiced from the business community concerning the manner in which guidance counselors directed their efforts to college-bound students at the expense of some non-college-bound students. The matter was considered as a staff problem, and the staff development program was designed to improve attitude and knowledge in the vocational areas and to measure the carry-over to students in terms of enrollment requests.

STATEMENT OF PROBLEM

The Standards of Quality state that 90% of the graduates not furthering their education will be prepared for the world of work. The enrollment in vocational programs in York County for 1974-75 was low, and it was felt that it was not high enough to insure that this standard could be met. Students appear to be waiting too long to decide on a direction for the future; thus, the enrollment in the second year vocational programs was very low.

County vocational teachers believe that counselors are more oriented to and aware of college-bound non-vocational background than they are perceptive to students who will be in the job market upon graduation.

This project was designed to make counselors aware of modern trends in vocational education by instructing them in the

various areas. It was also designed to make them more cognizant of community needs and improve their skills in counseling students who need a vocational education in order to enter the world of work.

It was believed that guidance counselors, who are very specialized educators, find it difficult to relate the concept of an occupation of non-college orientation with their background; however, with most guidance counselors having a master's degree, it was felt that this base would help build a more effective program. In order that counselors would become better informed of the latest trends in vocational education, the objectives of this program were:

1. To have counselors visit local employers to observe students and/or former students on the job.
2. To stimulate the program planning in a laboratory experience.
3. To have counselors inform more students about the world of work.
4. To have the counselors show a more positive attitude toward non college-bound students as shown by attitude pre-test and attitude post-test.

The hypothesis tested was that <u>if counselors are more aware of vocational opportunities, the vocational enrollment will increase</u>.

ANALYSIS OF FINDINGS - Part A

Objective number one was accomplished by conducting a field trip once a week for 13 weeks. These field trips were follow-up for a presentation that was made each week by one of the state

defined vocational areas.

Objective number two was completed as the follow-up for a presentation by the Virginia Employment Commission.

Objective number three tests the hypothesis of the basic research carried on and is discussed later in this paper.

Objective number four was met as measured by a locally designed attitude scale[1].

ANALYSIS OF FINDINGS - Part B

Question 1. of the attitude scale is shown in Fig. 1. Fig. 2 shows the analysis of teacher answers in tabular form.

Positive changes in attitude are significant in parts c, f, and o. Positive results are also indicated for part d, and l. Negative changes that are significant are found in part j with negative tendencies being found in g and n.

Fig. 3 is a copy of the second question of the Attitude Survey administered to the counselors. Fig. 3A is a copy of the answer sheet for Question 2 of the Attitude Survey.

Fig. 4 shows the rank order importance given various aspects of vocational counseling in September of 1974. Fig. 5 shows the rank order of importance given these same aspects of counseling in December of 1975, upon the completion of this staff development program. Fig. 6 compares these ranks and shows the changes that occurred as measured.

[1] Guidance Attitude Survey, York County Public Schools, Compiled by Richard E. Barber, School Psychologist.

Fig. 1

Question 1-Attitude Scale

Directions: This is a test of your attitude towards a number of statements listed below. We would like your candid opinion and we acknowledge there are degrees of intensity for attitudes and no two people will entirely agree on how to answer all of these statements. Your scores will be kept strictly confidential and will not be used to judge your job performance.

After reading a statement, if you strongly agree with it, write +3 next to the corresponding number on the score sheet. If you generally agree with the statement, write +2 next to the corresponding number, and if you only mildly agree, +1.

Likewise, if you strongly disagree with a statement, write -3, if you generally disagree, -2, and if you only mildly disagree, -1. Please do not leave any statements blank.

There is no time limit.

a. It is preferable to have a college degree in today's job market.

b. It is important to know a student's ability to counsel wisely.

c. Most students today are receiving adequate educational counseling.

d. Most students today are receiving adequate job counseling.

e. Students are aware of vocational opportunities that are available.

f. Counselors are aware of job opportunities for high school graduates.

g. More students should be going into vocational programs than are now.

h. Counselors need more time for vocational types of counseling.

i. It would be better if more students went on to college.

j. There are too few vocational training courses available.

k. A better student will avoid vocational training courses.

l. Counselors generally have sufficient information for college-bound students.

m. Many parents have a negative attitude towards vocational training.

n. The poorer student will be directed towards vocational training tracts.

o. Counselors have adequate knowledge of vocational training opportunities.

Fig. 2

Question 1 - Guidance Attitude Survey

	9-74			12-74			
Part	+	-	Total	+	-	Total	Difference
a.	17	7	+10	17	7	+10	a. 0
b.	33	0	+33	36	0	+36	b. + 3
c.	6	18	-12	13	8	+ 5	c. +17
d.	1	28	-27	4	21	-17	d. +10
e.	5	21	-16	4	21	-17	e. - 1
f.	8	14	- 6	16	7	+ 9	f. +15
g.	33	0	+33	26	3	+23	g. -10
h.	34	0	+34	35	0	+35	h. + 1
i.	3	13	-10	6	16	-10	i. 0
j.	28	1	+27	18	8	+10	j. -17
k.	14	6	+ 8	14	11	+ 3	k. - 5
l.	25	3	+22	31	0	+31	l. + 9
m.	21	3	+18	22	3	+19	m. + 1
n.	27	0	+27	21	4	+17	n. -10
o.	6	21	-15	18	4	+14	o. +29

Fig. 3

Question 2 - Attitude Scale

Directions: While counseling students we all tend to see certain areas as having more importance for decision making than others. Please rank order the following items in relative importance for counseling students as you presently see them. Rank from 1 (most important) to 15 (least important).

_____ grades

_____ social-economic background

_____ job market outlook

_____ vocational training opportunities

_____ salary

_____ student's interests

_____ scholarships

_____ on-job training available

_____ desires of parents

_____ advancement opportunities

_____ test data on student

_____ security of career

_____ job prestige

_____ personality of student

_____ aptitude

Fig. 3A

Scoring Sheet For Attitude Statements

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Fig. 4

Question 2 - Rank Order Results for 9-74

Rank order results 9-74

"Please rank order the following items in relative importance for counseling students as you presently see them."

The following ranks were obtained on the pre-test of 9-74.

Rank	Score	Statement
1.	21	student's interests
2.	35	aptitude
3.	46	personality of student
4.	77	job market outlook
5.	94	grades
6.	102	vocational training opportunities
7.	106	on-job training available
8.	108	social-economic background
9.	110	advancement opportunities
10.	112	security of career
11.	116	test data on student
12.	144	desires of parents
13.	148	scholarships
14.	151	salary
15.	171	job prestige

Fig. 5

Question 2 - Rank Order Results for 12-74

Rank order results 12-74

"Please rank order the following items in relative importance for counseling students as you presently see them."

The following ranks were obtained on the post-test of 12-74.

Rank	Score	Statement
1.	18	student's interests
2.	32	aptitude
3.	61	personality of student
4.	80	job market outlook
5.	90	grades
6.	93	test data on student
7.	105	vocational training opportunities
8.	111	security of career
9.	119	advancement opportunities
10.	127	on-job training available
11.	130	desires of parents
12.	133	salary
13.	134	scholarships
14.	143	social-economic background
15.	164	job prestige

Fig. 6

Question 2 - Rank Order of Items for Sept. 74 Compared to Dec.

Statement	Sept. 74 Rank	Sept. 74 Score	Dec. 74 Rank	Dec. 74 Score	Ra
Student's interests	1.	21	1.	18	
Aptitude	2.	35	2.	32	
Personality of student	3.	46	3.	61	
Job market outlook	4.	77	4.	80	
Grades	5.	94	5.	90	
Test data on student	11.	116	6.	93	
Vocational training opportunities	6.	102	7.	105	
Security of career	10.	112	8.	111	
Advancement opportunities	9.	110	9.	119	
On-job training available	7.	106	10.	127	
Desires of parents	12.	144	11.	130	
Salary	14.	151	12.	133	
Scholarships	13.	148	13.	134	
Social-economic background	8.	108	14.	143	
Job prestige	15.	171	15.	164	

Fig. 6

stion 2 - Rank Order of Items for Sept. 74 Compared to Dec. 74

	Sept. 74 Rank	Sept. 74 Score	Dec. 74 Rank	Dec. 74 Score	Rank Change	# Change
ests	1.	21	1.	18	0	- 3
	2.	35	2.	32	0	- 3
student	3.	46	3.	61	0	+15
ook	4.	77	4.	80	0	+ 3
	5.	94	5.	90	0	- 4
udent	11.	116	6.	93	+5	-23
ning opportunities	6.	102	7.	105	-1	+ 3
der	10.	112	8.	111	+2	- 1
ortunities	9.	110	9.	119	0	+ 9
available	7.	106	10.	127	-3	+11
nts	12.	144	11.	130	+1	-14
	14.	151	12.	133	+2	-18
	13.	148	13.	134	0	-14
background	8.	108	14.	143	-6	+35
	15.	171	15.	164	0	- 7

Fig. 7 is a copy of Question 3 which asked counselors to rank certain statements in regard to their greatest needs for further staff development. Fig. 8 compares their felt need at the beginning of the staff development program to that at the cease of the program.

Fig. 9 shows that the home economics requests at York for the school year 74-75 were 497, and for 1975-76 there were 396-showing a decrease of 99 youngsters. Tabb High School home economics requests showed 439 for the school year 74-75, and 677 for the school year 75-76 with an increase of 238 students. The 1974-75 total for home economics was 936 youngsters and 1073 for the school year 75-76, giving the county a total of 137 more requests for the '76 school session than the '75 request.

Fig. 10 shows that the industrial arts enrollment at York High School has increased 52 with the largest single program being in the graphic arts area. On the other hand, Tabb High School requests dropped from 546 to 383 making a total of 252 students less than the current year. The greatest drop in Tabb enrollment appears to be in basic photography and in the woodworking area.

Although the total enrollment in industrial arts is down, enrollment in world of construction and world of manufacturing are up at Tabb High School.

Fig. 11 shows the tabulation of enrollment requests in the field of distribution. First year D.E. is up in both schools, and second year D.E. enrollments did not drop.

The enrollment requests in the business education area are shown in Fig. 12. Introduction to business is signifantly

Fig. 7

Question 3 - Attitude Scale

Directions: Guidance counseling requires a continual awareness of many things in many areas. In relation to your own counseling abilities, please rank order the following statements in regards to your greatest need for further knowledge and proficiency (1) to least needed to gain further knowledge and proficiency (5).

____ business training opportunities

____ college-bound students

____ vocational programs

____ non-high school graduates

____ high school graduates

Fig. 8

Comparison of Areas Needed for Staff Development

	9-74		12-74		
In-Service Needs	Raw Score	Rank Order	Raw Score	Rank Order	Change in Raw Score
Business training opportunities	41	3.5	34	2.5	- 7
College-bound students	59	5	56	5	- 2
Vocational programs	22	1	34	2.5	+12
Non-high school graduates	32	2	28	1	- 4
High school graduates	41	3.5	43	4	+ 2

Fig. 9

HOME ECONOMICS

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course No.	Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	Coun Tota 75-7
100	KIT MGT	42	32	74	49	91	140
101	MEAL PREP	47	30	77	40	93	133
102	ENTERTAINING	14	18	32	20	28	48
103	CK AROUND WLD	32	47	79	24	44	68
104	CONVEN ECON CKG	15	27	42	26	36	62
105	DESSERTS	44	65	109	22	51	73
110	GRM CLTHNG SEL	21	15	36	11	23	34
112	CLOTH CONST	99	51	150	71	57	128
115	SEW W KNITS	33	26	59	20	31	51
116	DRAP & UPHOL	6	10	16	2	9	11
117	CR NEEDLEWK	80	45	125	44	53	97
130	INTERIOR DESIGN	10	13	23	8	41	49
131	HOUSE DESIGN	5	15	20	9	19	28
133	FAMILY FINANCE	13	4	17	9	16	25
134	CHLD DEVELOPMENT	22	32	54	25	82	107
140	WAGE EARNING	14	9	23	16	3	19
	TOTALS	497	439	936	396	677	1073

Fig. 9

HOME ECONOMICS

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 75-76	Cty. Chan School Ye 1974-75 1975-76
KIT MGT	42	32	74	49	91	140	+66
MEAL PREP	47	30	77	40	93	133	+56
ENTERTAINING	14	18	32	20	28	48	+16
CK AROUND WLD	32	47	79	24	44	68	-11
CONVEN ECON CKG	15	27	42	26	36	62	+20
DESSERTS	44	65	109	22	51	73	-36
GRM CLTHNG SEL	21	15	36	11	23	34	- 2
CLOTH CONST	99	51	150	71	57	128	-22
SEW W KNITS	33	26	59	20	31	51	- 8
DRAP & UPHOL	6	10	16	2	9	11	-5
CR NEEDLEWK	80	45	125	44	53	97	-28
INTERIOR DESIGN	10	13	23	8	41	49	+26
HOUSE DESIGN	5	15	20	9	19	28	+ 8
FAMILY FINANCE	13	4	17	9	16	25	+ 8
CHLD DEVELOPMENT	22	32	54	25	82	107	+53
WAGE EARNING	14	9	23	16	3	19	- 4
TOTALS	497	439	936	396	677	1073	+137

Fig. 10

INDUSTRIAL ARTS

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course No.	Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 75-76
250	WLD OF CONSTRCT	57	50	107	46	63	109
251	WLD OF MFG	25	11	36	15	39	54
253	MECHL DRAW	35	35	70	45	33	78
257	ADV MECHL DRAW	36	18	54	13	11	24
261	WOOD TECH	16	34	50	31	17	48
262	WOODWNG MACH	20	44	64	36	19	55
263	WOOD FINISHNG	24	47	71	33	15	48
264	WOOD REF & REP	19	45	64	31	17	48
265	BENCH METAL	3	57	60	2	21	23
268	BASIC PHOT	119	88	207	74	44	118
273	GRAPHIC ARTS	12	52	64	37	30	67
274	GRAPHIC ARTS	7	35	42	31	33	64
275	GRAPHIC ARTS	8	18	26	25	23	48
276	GRAPHIC ARTS	8	12	20	22	18	40
	TOTAL	389	546	935	441	383	824

Fig. 10

INDUSTRIAL ARTS

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 75-76	Cty.Change School Yr. 1974-75 1975-76
D OF CONSTRCT	57	50	107	46	63	109	+2
D OF MFG	25	11	36	15	39	54	+18
CHL DRAW	35	35	70	45	33	78	+ 8
V MECHL DRAW	36	18	54	13	11	24	-30
OOD TECH	16	34	50	31	17	48	- 2
OODKNG MACH	20	44	64	36	19	55	- 9
OOD FINISHNG	24	47	71	33	15	48	-23
OOD REF & REP	19	45	64	31	17	48	-16
ENCH METAL	3	57	60	2	21	23	-37
ASIC PHOT	119	88	207	74	44	118	-89
RAPHIC ARTS	12	52	64	37	30	67	+ 3
RAPHIC ARTS	7	35	42	31	33	64	+20
RAPHIC ARTS	8	18	26	25	23	48	+22
RAPHIC ARTS	8	12	20	22	18	40	+20
TOTAL	389	546	935	441	383	824	-111

Fig. 11

DISTRIBUTIVE EDUCATION

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course No.	Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 74-75
001	FUND OF DISTR	27	30	57	30	51	81
005	STUDIES IN MKTG	24	25	49	24	26	50
006	ADV ST. IN MKTG	17	9	26	7	7	14
	TOTAL	68	64	132	61	84	145

Fig. 11

DISTRIBUTIVE EDUCATION

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 74-75	Cty. Change School Yr. 1974-75 1975-76
UND OF DISTR	27	30	57	30	51	81	+24
TUDIES IN MKTG	24	25	49	24	26	50	+ 1
DV ST. IN MKTG	17	9	26	7	7	14	-12
TOTAL	68	64	132	61	84	145	+13

Fig. 12

BUSINESS EDUCATION

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course No.	Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 75-76
200	INTRO BUSINESS	67	40	107	48	75	123
210	CLRK TYPIST I	11	11	22	21	27	48
214	CLRK TYPIST II	8	14	22	12	12	24
215	STENO I	29	33	62	42	36	78
219	STENO II	12	9	21	19	6	25
220	BOOKKEEPING I	45	25	70	70	40	110
224	ADV BOOKKEEPING	8	9	17	13	14	27
	TOTALS	180	141	321	225	210	435

Fig. 12

BUSINESS EDUCATION

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 75-76	Cty. Chan School Yea 1974-75 1975-76
INTRO BUSINESS	67	40	107	48	75	123	+16
CLRK TYPIST I	11	11	22	21	27	48	+26
CLRK TYPIST II	8	14	22	12	12	24	+ 2
STENO I	29	33	62	42	36	78	+16
STENO II	12	9	21	19	6	25	+ 4
BOOKKEEPING I	45	25	70	70	40	110	+40
ADV BOOKKEEPING	8	9	17	13	14	27	+10
TOTALS	180	141	321	225	210	435	+141

up at Tabb High and significantly low at York. Clerk typist II enrollment at both schools has been maintained for the second year, 1975-76; however, the number of students not pursuing the second year of stenography is low. The largest single enrollment increase is in bookkeeping I at both schools.

The I.C.T. enrollment requests as shown in Fig.13 are low, especially in holding students from I.C.T. I, school year 74-75, to I.C.T. II, 75-76. The total county enrollment in I.C.T. is 28 students less than the school year 1974-75.

The numbers shown in Fig. 14 include all subject areas offered at the vocational technical center, as well as the masonry and electronics programs offered locally. This combination seemed appropriate since students at one high school may take his training locally, and at the other school, the program availability may only be at the peninsula center.

In the York County school system, Naval Junior Reserve Officers Training is considered a part of the vocational education sector because it logically leads to a specific type of career. York High School enrollment of 51 in first year, during the school year of 1974-75, has dropped to 28 for the school year 1975-76, as well as the enrollment for NJROTC II to NJROTC III in 1975-76 having dropped by ten students also. The enrollment at Tabb High from NJROTC I, 1974-75, has dropped from 65 to 54 for 1975-76. First year enrollment has dropped at both schools with a county-wide decline of 23. (Fig. 15)

The miscellaneous category in this report (Fig. 16) is included as it illustrates the courses being offered one year

Fig. 13

INDUSTRIAL COOPERATIVE TRAINING

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course No.	Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 75-76
010	ICT I	42	43	85	28	15	43
014	ICT II	7	4	11	14	10	24
	TOTAL	49	47	95	42	25	67

-19-

Fig. 13

INDUSTRIAL COOPERATIVE TRAINING

Enrollment Request Data
School Year 74-75 Compared to 75-76

ourse itle	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 75-76	Cty.Change School Yr. 1974-75 1975-76
T I	42	43	85	28	15	43	-42
T II	7	4	11	14	10	24	+13
TOTAL	49	47	95	42	25	67	-28

Fig. 14

VO-TECH

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course No.	Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 75-76
020-057	VO TECH	199	143	342	213	170	383
TOTAL		199	143	342	213	170	383

Fig. 14

VO-TECH

Enrollment Request Data
School Year 74-75 Compared to 75-76

ourse itle	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 75-76	Cty. Cha School Y 1974-75 1975-76
O TECH	199	143	342	213	170	383	+41
TOTAL	199	143	342	213	170	383	+41

Fig. 15

NAVAL SCIENCE

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course No.	Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	Coun Tota 75-7
060	NAV SCIENCE I	51	65	116	28	47	7
064	NAV SCIENCE II	26	30	56	28	54	8
065	NAV SCIENCE III	21	25	46	16	22	3
	TOTAL	98	120	218	72	123	1

-21-

Fig. 15

NAVAL SCIENCE

Enrollment Request Data
School Year 74-75 Compared to 75-76

se	Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 75-76	Cty. Cha School Y 1974-75 1975-76
	NAV SCIENCE I	51	65	116	28	47	75	-41
	NAV SCIENCE II	26	30	56	28	54	82	+26
	NAV SCIENCE III	21	25	46	16	22	38	- 8
	TOTAL	98	120	218	72	123	195	-23

Fig. 16

MISCELLANEOUS

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course No.	Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 75-76
111	BEG CLOTH CONST	--	40	40	23	69	92
119	TAILORING	--	12	12	4	10	14
120	FLAT PATTERN	--	8	8	1	--	1
132	BACHLR SURVIVAL	--	--	--	17	15	32
204	EXPL TYPING	57	--	57	13	--	13
205	TYPING	107	173	280	160	258	418
209	PERS TYPING	60	64	124	88	--	88
225	OFFICE SERVICES	18	--	18	44	--	44
252	WLD OF TRANSP.	--	--	--	54	--	54
266	SHEET MTL FABR	--	39	39	2	18	20
267	BASIC WELDING	--	97	97	1	19	20
269	ADV PHOT	85	--	85	75	--	75
271	PRINTING	57	65	122	39	--	39
299	DIRECTED STUDY	19	9	28	19	--	19
007-008	WECEP & EFE	13	--	13	7	--	7
	TOTALS	416	507	923	547	389	936

Fig. 16

MISCELLANEOUS

Enrollment Request Data
School Year 74-75 Compared to 75-76

Course Title	York 74-75	Tabb 74-75	County Total 74-75	York 75-76	Tabb 75-76	County Total 75-76	Cty. Chang School Yea 1974-75 1975-76
BEG CLOTH CONST	--	40	40	23	69	92	+52
TAILORING	--	12	12	4	10	14	- 2
FLAT PATTERN	--	8	8	1	--	1	- 7
BACHLR SURVIVAL	--	--	--	17	15	32	+32
EXPL TYPING	57	--	57	13	--	13	-44
TYPING	107	173	280	160	258	418	+138
PERS TYPING	60	64	124	88	--	88	-36
OFFICE SERVICES	18	--	18	44	--	44	+26
WLD OF TRANSP.	--	--	--	54	--	54	+54
SHEET MTL FABR	--	39	39	2	18	20	-19
BASIC WELDING	--	97	97	1	19	20	-77
ADV PHOT	85	--	85	75	--	75	-10
PRINTING	57	65	122	39	--	39	-83
DIRECTED STUDY	19	9	28	19	--	19	- 9
WECEP & EPE	13	--	13	7	--	7	-6
TOTALS	416	507	923	547	389	936	+13

and not another at both schools. The beginning clothing construction is up at York High School. Typing has increased at Tabb as personal and exploratory typing were phased out, and World of Transportation is being offered in the County for the first time. Printing is being phased out, as such, to encourage interest in the forthcoming World of Communication.

CONCLUSIONS AND RECOMMENDATIONS

Home Economics - Contrary to popular belief, students show less interest in areas of sewing than in cooking and consumer homemaking.

Industrial Arts - Although the total enrollment in Industrial Arts is down, enrollment in World of Construction and World of Manufacturing are up at Tabb High School, and it is felt that the general drop is due to phasing in of the "World of" with communications as the next target course.

Distributive Education - Figures show that the program is growing and enrollments are being maintained through the program to mastery of skills.

Business - Typewriting I is shown on the miscellaneous chart with some other introductory vocational courses. This increase is very encouraging because the bulk of the enrollment is at the 10th-year level.

The drop in Stenography II and maintenance of Clerk Typist II is due in part to shifting less capable students from Steno II to Clerk Typist II.

The large increase in enrollment requests for bookkeeping is encouraging other than the numbers of boys showing interest in this

group.

Industrial Cooperative Training - The I.C.T. area has shown a decrease of 28 students throughout the county. This drop is attributed to the economy level in the local area.

The senior intensified program, which was not a consideration of this original program, will be working with 23 students and follow-up of this, in view of the regular I.C.T. employment problems, is suggested.

Vocational Technical Programs - There has been much work done to upgrade the quality of instruction at the local center. Not only have guidance counselors stressed the importance and value of these programs, but transportation has been improved and student-to-student communication has been of a more positive nature.

Naval Junior Reserve Officer Training - Conferences with teachers, counselors, and administrators have not revealed any particular reasons for this decline in enrollment. Only general comments as to a sign of the times and the discontinuance of the military draft may have played some part in the situation.

A complete summary of vocational and pre-vocational courses, years 9 through 12, is shown in Fig. 17. There is significant increase in the enrollment in Home Economics, Business Education, and the Vocational Technical program. Departments dropping in enrollment are Industrial Arts and I.C.T. The net gain of students enrolled in the vocational areas is 155.

Work done with counselors can be considered to have had a positive effect on this increase, not only from total figures, but

Fig. 17

COUNTY-WIDE TALLY

Vocational Education Study Requests

Subject Area	York	Tabb	74-75	York	Tabb	75-76	C C
IND. ARTS	389	546	935	441	383	824	
HOME EC.	497	439	936	396	677	1073	
D. E.	68	64	132	61	84	145	
BUSINESS	180	141	321	225	210	435	
I.C.T.	49	47	96	42	25	67	
VO TECH	199	143	342	213	170	383	
ROTC	98	120	218	72	123	195	
MISCELLANEOUS	416	507	923	547	389	936	
TOTAL	1896	2007	3903	1997	2061	4058	

Fig. 17

COUNTY-WIDE TALLY

Vocational Education Study Requests

ect	York	Tabb	74-75	York	Tabb	75-76	County Change
ARTS	389	546	935	441	383	824	-111
EC.	497	439	936	396	677	1073	+137
.	68	64	132	61	84	145	+ 13
NESS	180	141	321	225	210	435	+114
T.	49	47	96	42	25	67	- 29
ECH	199	143	342	213	170	383	+ 41
	98	120	218	72	123	195	- 23
ELLANEOUS	416	507	923	547	389	936	+ 13
TOTAL	1896	2007	3903	1997	2061	4058	+155

from careful analysis which show beginning courses are being taken at an earlier year level.

The research indicates that there is still a need for programs that allow work study activities for younger students. This issue has been spoken to in recent self-studies at both high schools and is of much concern to counselors at the intermediate level.

York County Public Schools
P. O. Box 451
Yorktown, Virginia 23490
Telephone 887-2611

E. F. Pope
Division Superintendent

MEMORANDUM

TO: Secondary Principals
Guidance Counselors and Vocational Coordinators

FROM: Elizabeth Charlton and Ernest W. Mooney, Jr.

DATE: July 12, 1974

SUBJECT: In-service Mini-Grant

York County schools have received a mini-grant from the Vocational Division of the State Department of Education to support an In-service program for guidance counselors. It is proposed that counselors meet twice a week on Tuesdays and Thursdays at 1:30 P.M. On Tuesdays, counselors will have a presentation on various phases of vocational and career education, and on Thursdays there will be a field trip or some kind of practical application of the Tuesday meeting.

The first session will be conducted on Tuesday, September 3, at the school board office, by Mr. John R. Cook from the State Department of Education. Mr. Cook will speak to the group on the changing role and function of the counselor. This presentation will be followed by a trip to the Newport News Shipbuilding and Dry Dock Co. on Thursday, September 5, 1974. It is assumed that most of the activities of the in-service program will be conducted during the school day; however, this first visit to the shipyard will take until about 5:30 P.M. This is because the actual tour in the yard itself cannot begin until after the shift changes at 3:30.

An application for this in-service activity to be counted as continuing education units toward certificate renewal is pending. There is apparently no reason for it not being approved.

Other details concerning this program will be discussed at the September 3rd meeting.

copies to: Mr. Pope
Mr. Beachum

A G E N D A

YORK COUNTY SCHOOL BOARD MEETING

April 29, 1974
7:30 P.M.

1. Call to Order
2. Hearings and Delegations
3. Superintendent's Report
4. Old Business:
   a. Further Consideration of Prior Service Credit - Continuing Contract
   b. Further Consideration of Bids on Staff Automobile
5. New Business:
   a. Consideration of Evaluation Procedures
   b. Consideration of Application for Study Project for Design and Operation of a Year-Round School Program
   c. Approval of Mini-Grant for Vocational Guidance in Secondary Schools
   d. Consideration of Bids on Business Machine Maintenance - 1974-75
   e. Personnel Actions
6. Communications
7. Matters by Board Members and/or Superintendent
8. Adjournment

GUIDANCE IN-SERVICE SCHEDULE

September	3	Role and Functioning of Councelors - Mr. Cook
	5	Newport News Shipbuilding and Dry Dock Co..
	10	Group Guidance - Dr. Jack Duncan, V.C.U.
	12	Hospital Health Careers - Riverside Hospital
	17	NASA - Mr. David Goin, Asst. for Public Affairs
	19	NASA - Tour
	24	Overview of Vocational Education - Mr. Parker, Mr. Woolard
	26	Airport
October	1	Business
	3	Bank
	8	Industrial Arts
	10	Manufacturing
	15	Home Economics
	17	Colonial Williamsburg Chef School
	22	Distributive Education
	24	Retail Establishment
	29	I. C. T.
	31	Automotive Repair
November	5	Vo-Tech School
	7	Vo-Tech School
	12	Masonry
	14	Construction
	19	Electronics
	21	T. V. Repair
	26	Virginia Employment Commission
December	5	Lab Exercise
	10	Lab Exercise
	12	Lab Exercise
	17	Role Playing
	19	Role Playing

YORK COUNTY PUBLIC SCHOOLS
Yorktown, Virginia

TO: All Guidance Personnel

FROM: Elizabeth Charlton
Secondary Supervisor

DATE: July 30, 1974

SUBJECT: Brief Meeting

There will be a brief meeting of all guidance personnel and vocational coordinators on Wednesday, August 7 at 2:30 P.M. in the instruction office-School Board building, Yorktown. The purpose of this meeting is to discuss the guidance in-service program for the school year 1974-75.

Copies to:
Mr. Milam
Mr. Miller
Mr. Parker
Mr. Woolard
Mr. Beecham
Mr. Mooney

YORK COUNTY PUBLIC SCHOOLS
Yorktown, Virginia

TO: All Counselors

FROM: Ernest W. Mooney, Jr.
Director of Instruction

DATE: January 27, 1975

Those of you who participated regularly in the vocational in-service program in the fall will be happy to know that I received approval for that program today. I will be asking Mrs. Charlton for additional information concerning names and total hours as soon as I can. After that, I will submit to Richmond the appropriate forms giving you three non-credit points towards certificate renewal and it will be a matter of record in the State Department of Education.

EWM/rlh

GUIDANCE ATTITUDE SURVEY

York County Public Schools

Compiled by
Richard E. Barber
School Psychologist

Name_____

School_____

Date_____

Directions: This is a test of your attitude towards a number of statements listed below. We would like your candid opinion and we acknowledge there are degrees of intensity for attitudes and no two people will entirely agree on how to answer all of these statements. Your scores will be kept strictly confidential and will not be used to judge your job performance.

After reading a statement, if you strongly agree with it, write +3 next to the corresponding number on the score sheet. If you generally agree with the statement, write +2 next to the corresponding number, and if you only mildly agree, +1.

Likewise, if you strongly disagree with a statement, write -3, if you generally disagree, -2, and if you only mildly disagree, -1. Please do not leave any statements blank.

There is no time limit.

1. It is preferable to have a college degree in today's job market.
2. It is important to know a student's ability to counsel wisely.
3. Most students today are receiving adequate educational counseling.
4. Most students today are receiving adequate job counseling.
5. Students are aware of vocational opportunities that are available.
6. Counselors are aware of job opportunities for high school graduates.
7. More students should be going into vocational programs than are now.
8. Counselors need more time for vocational types of counseling.
9. It would be better if more students went on to college.
10. There are too few vocational training courses available.
11. A better student will avoid vocational training courses.
12. Counselors generally have sufficient information for college bound students.
13. Many parents have a negative attitude towards vocational training.
14. The poorer student will be directed towards vocational training tracts.
15. Counselors have adequate knowledge of vocational training opportunities.

Scoring Sheet For Attitude Statements

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Directions: While counseling students we all tend to see certain areas as having more importance for decision making than others. Please rank order the following items in relative importance for counseling students as you presently see them. Rank from 1 (most important) to 15 (least important).

___ grades

___ social-economic background

___ job market outlook

___ vocational training opportunities

___ salary

___ student's interests

___ scholarships

___ on-job training available

___ desires of parents

___ advancement opportunities

___ test data on student

___ security of career

___ job prestige

___ personality of student

___ aptitude

Directions: Guidance counseling requires a continual awareness of many things in many areas. In relation to your own counseling abilities, please rank order the following statements in regards to your greatest need for further knowledge and proficiency (1) to least needed to gain further knowledge and proficiency (5).

___ business training opportunities

___ college-bound students

___ vocational programs

___ non-high school graduates

___ high-school graduates

ACCESSION NUMBER: VT102307

PUBLICATION DATE: 30JUN75

TITLE: THE EFFECTS OF SELECTED INSTRUCTIONAL STRATEGIES ON LEARNING EFFICIENCY IN VOCATIONAL TECHNICAL EDUCATION PROGRAMS. PHASE II. FINAL REPORT.

PERSONAL AUTHOR: DRUMMOND, ROBERT J.; VITRO, FRANK T.

DESCRIPTOR: *COMPARATIVE ANALYSIS; *LEARNING; *PSYCHOMOTOR SKILLS; INDUSTRIAL ARTS; VOCATIONAL EDUCATION; RESEARCH PROJECTS; *TEACHING METHODS

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 65P.

ABSTRACT: THIS STUDY WAS DESIGNED TO INVESTIGATE THE EFFECTS OF PRACTICE ON THE MASTERY OF TWO INDUSTRIAL ARTS SKILLS. THE MAJOR QUESTION ASKED WAS WHETHER A FILM FOLLOWED BY PRACTICE LEADS TO BETTER MASTERY THAN A FILM PRESENTED WITHOUT PRACTICE. ALSO THE RELATIONSHIP BETWEEN COGNITIVE, AFFECTIVE, AND PSYCHOMOTOR ASPECTS OF THE TASKS WERE EXPLORED. THE SUBJECTS WERE 148 FOURTH TO EIGHTH GRADE BOYS AND GIRLS IN A SCHOOL UNION IN WHICH THERE HAD BEEN NO PREVIOUS INDUSTRIAL ARTS PROGRAMS. STUDENTS WERE RANDOMLY ASSIGNED TO EXPERIMENTAL AND CONTROL GROUPS AND WERE GIVEN DIFFERENT TYPES OF INSTRUCTIONAL TREATMENTS. THEY WERE GIVEN ATTITUDE AND KNOWLEDGE TESTS ON THE FILMS AND WERE RATED BY EXPERTS ON THEIR SKILL PERFORMANCE IN HAMMERING AND SAWING. RESULTS ARE DESCRIBED BY INSTRUCTIONAL TREATMENT, BY SEX, AND BY LEVEL OF INTELLIGENCE. CORRELATIONS BETWEEN KNOWLEDGE, ATTITUDE, AND SKILL PERFORMANCE ARE PRESENTED. A SUMMARY OF THE EMPIRICAL RESULTS AND THE INSTRUCTIONAL APPLICATIONS ARE PRESENTED, ALONG WITH IMPLICATIONS FOR CURRICULUM, TEACHERS, AND ADMINISTRATORS. (AUTHOR/NJ)

INSTITUTION NAME: MAINE UNIV., ORONO. COLL. OF EDUCATION.

SPONSORING AGENCY NAME: MAINE STATE DEPT. OF EDUCATIONAL AND CULTURAL SERVICES, AUGUSTA. BUREAU OF VOCATIONAL EDUCATION.; OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

VT 102 307

FINAL REPORT

THE EFFECTS OF SELECTED INSTRUCTIONAL STRATEGIES ON LEARNING EFFICIENCY IN VOCATIONAL TECHNICAL EDUCATION PROGRAMS

PHASE II

CONDUCTED UNDER PART C OF PUBLIC LAW 90-576

ROBERT J. DRUMMOND

FRANK T. VITRO

COLLEGE OF EDUCATION
UNIVERSITY OF MAINE
ORONO, MAINE 04473

JUNE 30, 1975

VT 102 307

FINAL REPORT

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PHASE II

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ROBERT J. DRUMMOND FRANK T. VITRO

COLLEGE OF EDUCATION
UNIVERSITY OF MAINE
ORONO, MAINE 04473

JUNE 30,1975

FINAL REPORT

RESEARCH PROJECT

CONDUCTED UNDER PART C OF PUBLIC LAW 90-576

The project reported herein was performed pursuant to a grant from the Bureau of Vocational Education, Maine Department of Educational and Cultural Services. Grantees undertaking such projects under State Department sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions do not, therefore, necessarily represent official Department of Educational and Cultural Services position or policy.

ROBERT J. DRUMMOND AND FRANK T. VITRO
COLLEGE OF EDUCATION
UNIVERSITY OF MAINE
ORONO, MAINE 04473

June 30,1975

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ABSTRACT

The study was designed to investigate the effects of practice on the mastery of two industrial arts skills. The major question asked was whether a film followed by practice leads to better mastery than a film presented without practice. Also the relationship between cognitive, affective and psychomotor aspects of the tasks were explored. Two skill areas were chosen: hammering and sawing. Two other films: A Safe Shop and Selecting Woods were utilized in the experiment.

A post-test only control group design was used to test the main hypothesis. Correlational analysis, step-wise multiple regression and factor analysis were used to investigate the relationships between the variables. The subjects were 148 fourth to eighth grade boys and girls in a school union in which there had been no previous industrial arts programs. Students were randomly assigned to experimental and control groups. The students were provided different types of instructional treatments. The students were given attitude and knowledge tests on the films they were shown and rated by experts on their skill performance on hammering and sawing. They were administered a battery of achievement, intelligence, attitude tests as well as given the Rod-and-Frame test to identify their cognitive style.

Results are described by instructional treatment, by sex and level of intelligence for the first set of research questions. Correlations between knowledge, attitude and skill performance are presented as well as the factor analysis of the major variables in the study and regression analysis.

A summary of the emperical results as well as the instructional applications of the results is listed. Implications for curriculum, teachers and administrators are presented. Recommendations for the State Department of Educational and Cultural Services, Pre-service and In-service Education for teachers, administrators, curriculum developers and additional research are given.

I. Definition of Problem Area:

Few research studies are available in the area of vocational education related to the application of principles of cognitive, psychomotor or affective learning. Knowledge of the learning process is vital to educators at every academic level in the selection of appropriate learning and teaching strategies leading to the most effective student mastery of skills and concepts. The AVA (1969) placed as one of its six research priorities the need to analytically investigate the "process" of vocational education. This organization also stressed the need to assess the "end products" of vocational education since such outcomes or objectives have not received adequate consideration nor have they been effectively defined and operationally delineated.

In Maine and other states there have been limitations in the hardware available for instructional purposes in most classrooms, shops and laboratories. This has led to the exploration of films, video tapes and other audio-visual techniques by teachers in the preparation and delivery of their instruction. Such developments have led learning specialists to investigate the use of media and various types of mediated instructional methods in an effort to identify those that are most effective in achieving instructional outcomes. The main strategy in the project was to design and conduct an empirical investigation to attempt to demonstrate the relative effectiveness of different types of instructional techniques.

II. Rationale and Justification

There are few studies available related to instructional methods and learning processes specific to vocational education. Simpson (1966) in a year long study of the classification of psychomotor objectives, recommended that more research was needed in the clarification of the psychomotor area as well as into its interactions with the cognitive and affective domains.

The research has centered primarily around the use of films since most schools have limited equipment and are more or less limited to the use of group instruction. Moeler (1967, 1968) found that films were not a sufficient substitute for individual demonstration but could be effective supplements to well-integrated instructional programs. Sommer (1970) reported that teacher plus film (single-concept loop) were more effective than teacher alone. Furthermore, the film-only group learned as much as the teacher-only group. He also reported that need for repetition and/or demonstration was substantially reduced with the films. Boys and girls did not differ significantly in their performance on any of the measures utilized.

These studies suggest that audio-visual aids such as films tend to be more effective under certain conditions than others. Little reserach has been conducted combining film and other audio-visual techniques with "hands-on" experiences which incorporate a practical "action" phase within the instructional sequence. The previous research studies mentioned as well as others do not typically use the subjects as their own controls, and also they usually utilize more than one task under different conditions.

GOALS AND OBJECTIVES OF THE PROJECT

The project had a number of specific objectives to be investigated. First of all, the effects of practice, "hands-on" experience, was studied in relation to typical industrial arts objectives. The question asked was whether a film followed by practice leads to better mastery than a film presented without practice.

Secondly, the relationship between cognitive, affective and psychomotor aspects of the task were explored. Two questions were asked: (1) What is the structure and relationship between the cognitive, affective and psychomotor variables related to success in the selected tasks and (2) What variables best predict performance of the psychomotor tasks selected.

In addition, the contribution of sex and level of intelligence to the mastery of these tasks was investigated.

Experimental Design

The experimental design utilized to test the major hypothesis of the study was a post-test only control group design. Students were randomly assigned to treatment groups by grade.

PROCEDURES

Sample

The sample selected for the study were 148 students enrolled in grades four through eight at the John R. Graham School in Veazie. The population was chosen because the school does not have any industrial arts program for the students in the upper grades. Experience, therefore, could be controlled through design and random selection. The Veazie-Orono school union had just received a Title III grant for establishing a program in practical arts -- Practical Arts through Community Helpers. The students were just about to begin on a carpentry unit and the films and experiences chosen related to the goals of the project.

Girls as well as boys were utilized in the experiment. Seventy-six of the sample were boys; 72 were girls. Thirty students were at the fourth, seventh, and eighth grade level while 29 participated at the fifth and sixth grade level.

Films

Four films were selected to be used for the experiment. It should be noted that in the original research proposal, the Department of Educational and Cultural Services had agreed to provide the films and objectives to be tested. Because of a number of factors and lateness in the project year, the project staff was given the task of selecting the films and objectives to be tested. The following procedures were used in selecting the films:

1) A review of behavior objectives for typical industrial arts programs was made.
2) The consultant for industrial arts from the Department of Educational and Cultural Services was contacted to provide information on available films and films commonly used by schools within Maine.
3) The staff reviewed the list of films for appropriateness, availability, and usefulness.
4) Six films were secured for preview. A panel of research staff members and school personnel selected four of the films for use in the experiment. These were:

   Hand Saws*

   Knowing Your Woods*

   Using Screws and Nails*

   Industrial Arts: A Safe Shop*

   The films rejected were Boring and Drilling Tools and Planes. These were not used because the tasks were too complicated for naive subjects and more specialized equipment was needed to conduct the testing.

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*Young America Films

Experimental Procedure

Two different instructional treatments were utilized. Students were shown the two performance films and then groups either given hands-on experiences or immediately tested without any practice. The "hands-on" experience or laboratory experiences were directed by union carpenters.

The performance ratings were made by the three carpenters. They were asked to view the film and the rating procedures were discussed with them prior to their work with the students.

The four through six experimental group had a discussion of wood and shop safety prior to taking the knowledge tests. All other students took the knowledge and attitude tests for each of the four tasks after the films were shown.

Criterion Tests

For each of the four films used a knowledge test of ten items was constructed as well as an attitude test of five items. Copies of each of the tests used can be found in Appendix A of the report. For two of the films, performance checklists were designed based upon the specific components of the tasks to be demonstrated, sawing and hammering. These two scales are also included in Appendix A of the report.

Statistical Analysis

To study the effects of hands-on experience on skill performance, t tests were used as well as analysis of variance to test the difference between the means by treatment group.

The second phase of the study concerned relationship between the variables. Pearson Product Moment Correlations were used to compare the relationship between knowledge, attitude and skill performance of the tasks chosen.

Factor analysis was used to explore the structure of the affective, cognitive and psychomotor skill variables.

Stepwise multiple regression was used to identify the variables which best predict the psychomotor tasks selected.

The affective, cognitive and psychomotor skill variables were broken down by grade, by sex, and by level of intelligence. Analysis of variance was first used to test whether the means were different and then Duncan's Multiple Range Test was used to identify between which groups there were significant differences.

All computations were performed on the IBM 370-45 Computer of the Computing and Data Processing Service of the University of Maine.

Other Instruments Used

Three tests were used to assess dimensions in the cognitive domain. The Lorge-Thorndike Intelligence Test (1966) which measures both verbal and non-verbal intelligence was used to measure the scholastic aptitude of the students.

The Iowa Test of Basic Skills (1971) was used as a measure of the student's school performance. The test measures reading vocabulary, reading comprehension, spelling, capitalization, punctuation, usuage, map reading, reading graphs, reference material skills, arithmetic concepts and arithmetic problem solving.

The Occupational Knowledge Test (1974) was used to assess the occupational knowledge of students in the experiment. The Occupational Knowledge is a revision of the Occupational Cognizance Test (Heath, 1969) made by LaMora (1974) for his dissertation. Heath developed eight forms of the test to measure the children's knowledge of occupations and their occupational educational expectations. The tests each contained twelve questions selected from among the following categories:

1. education and training required for specific occupations
2. nature of the work involved in specific occupations
3. recognition of the relationship of other occupations to a specified occupation
4. recognition of the field of work corresponding to a specified occupation

LaMora broadened the coverage of occupations used in the items to include a more proportional coverage based upon DOT categories and surveys on children's knowledge and interest on occupational fields.

Personality and Attitude Instruments

The Self-Concept and Motivation Inventory: What Face Would You Wear? (Milchus, Farrah, and Reitz, 1968) was used to measure academic self-concept. The test contains four scales, two for self-concept and two for motivation. The

two self-concept scales are Role Expectations and Self Adequacy. Role expectations measures the positive acceptance of the aspirations and demands that the students think others expect of them. Self adequacy relates to the positive regard with which students view their present and future probabilities of success. These two scales are added and yield a total self-concept score. The two motivation scales are achievement needs and achievement investment. The former is the positive regard with which student perceives the intrinsic and extrinsic rewards of learning and performing in school. Achievement investment or failure avoidance measures the awareness and concern toward shunning the embarrassment and sanctions which are associated with failure in school. The two motivation scalesare added to give a total motivation score.

The School Sentiment Inventory (1972) is a publication of the Instructional Objectives Exchange. For the intermediate level there are 81 items in which students are asked to respond "true" or "untrue" to a series of statements regarding school. There are seven scales. Three relate to evaluation of the teacher: mode of instruction, authority and control and interpersonal relationships with pupils. The four other scales measure: students' attitudes toward learning, social structure and climate, peers, and general attitude toward school.

Learning Style

The Portable Rod-and-Frame Test (Oltman, 1968) was used to assess the cognitive style status. It was individually administered to the students. Cognitive style is a term utilized to describe pervasive and consistent modes that characterize how particular individuals come to know their world and how they organize and respond to their knowledge of it. Witkin (1962) describes two basic modes of information processing, field independence and field dependence. In brief, this refers to the tendency for one's perceptions to be influenced (FD) or not influenced (FI) by the context in which the stimuli are embedded.

RESULTS

Effects of Practice on Performance

The first research question was whether skill performance introduced by a film and followed by practice, hands-on experience, leads to better mastery of a psychomotor skill than when a film is presented without practice. The results of the t analysis for hammering and sawing skills are presented in Table 1.

Table 1

Comparison of the Means of Experimental and Control Groups of 4th to 6th Graders, and 7th and 8th Graders on Hammering and Sawing Skills

Skill	Group	Mean	Standard Deviation	df	t
Hammering					
Grade 4-6	Experimental	23.855	6.180	83	0.3794
Grade 4-6	Control	24.435	6.508		
Grade 7-8	Experimental	25.633	4.343	56	1.180
Grade 7-8	Control	26.893	3.735		
Sawing					
Grade 4-6	Experimental	20.120	4.676	87	2.3066*
Grade 4-6	Control	17.484	5.183		
Grade 7-8	Experimental	24.700	4.572		
Grade 7-8	Control	21.067	4.777	58	3.009**

* $p < .05$

** $p < .01$

There were no mean differences between the experimental groups who saw the film followed by supervised practice and the group who saw the film and did not have any practice at either the middle or upper grades. There were, however, differences on the means of the ratings of saw performance at both grade levels between the two groups. The difference was significant at the .05 level for the middle grade group and at the .01 level for the upper grade group. The groups receiving practice after the films scored higher ratings on the performance test.

Possibly no differences were evident on the hammering task since the task is a relatively simple psychomotor task whereas sawing is a more complex task which involves more motor skills and knowledge. Teachers utilizing films to introduce and teach more complex industrial arts skills may find immediate practice necessary for reinforcement of skills.

Effects of Instructional Strategy on Knowledge and Attitude

Two different instructional ways of presenting the films were used with the treatment groups in Grades 4 to 6. One group, the experimental group, had a class session, 40 minutes, to discuss shop safety before the use of the film and another session on selection of woods prior to the use of the films. The second group, the control group, was shown the film only. Both groups were given the knowledge and attitude tests after the showing of the films. The results of the comparison between means by the t test is presented in Table 2.

Table 2

COMPARISON OF THE MEANS OF EXPERIMENTAL AND CONTROL GROUPS OF MIDDLE GRADE STUDENTS ON KNOWLEDGE AND ATTITUDE TESTS

Area	Group	Mean	Standard Deviation	d.f.	t
Safety Knowledge					
	Experimental	7.954	1.924	88	1.8145
	Control	8.560	1.530		
Safety Attitude					
	Experimental	14.738	2.944	88	.6323
	Control	15.160	2.511		
Wood Knowledge					
	Experimental	4.560	1.502	87	2.1295*
	Control	3.828	1.443		
Wood Attitude					
	Experimental	13.219	3.658	87	1.0616
	Control	14.120	3.444		

* $p < .05$

There were no significant differences between instructional treatments on the safety tests and wood attitude test but significant difference at the .05 level on the wood knowledge test. Safety is a topic of concern to students in all grades and transfer may have taken place to applications within a shop. The film on wood knowledge was more complex and difficult for the sample. The group who were presented information about wood prior to the film knew more about what to look for in the presentation. The use of advanced organizers and behavior objectives in instruction help students focus attention on the required areas of knowledge. Attitude change demands a more complex instructional strategy and especially attitudes toward industrial arts objectives which are a part of a new experience for most students.

Levels of Intelligence, Knowledge, Attitude and Skill Performance on Selected Industrial Arts Objectives

The population of the study was divided into three groups based upon their verbal score on the Lorge-Thorndike Intelligence Test. The top group had above average IQ's, 111 and higher; the middle group had average IQ's, 90-110; and the lower group below average IQ's, 89 and below. The results of the comparison on the industrial arts variables are presented in Table 3. There were no significant differences between the means of the middle grade groups broken down by level of intelligence on any of the knowledge, attitude or performance skills tests. There were three significant differences between the means according

Table 3

Analysis of Variance of Selected Industrial Arts Variables for Middle Grade and Upper Grade Students by Level of Intelligence

Variable	IQ Group	Mean	Standard Deviation	df	F
Saw Knowledge					
Middle	Low	5.538	2.904		
	Average	6.676	1.701	2/72	1.7753
	High	6.692	1.784		
Upper	Low	7.500	1.829	2/46	3.5981*
	Average	7.118	1.900		
	High	8.556	1.149		
Saw Attitude					
Middle	Low	11.538	2.933	2/71	0.7424
	Average	12.029	3.362		
	High	12.808	3.406		
Upper	Low	12.714	4.340	2/46	1.2513
	Average	10.824	3.046		
	High	11.333	2.828		
Saw Performance					
Middle	Low	17.077	6.144	2/71	0.8459
	Average	18.735	4.712		
	High	17.346	4.409		
Upper	Low	23.071	3.583	2/46	1.8867
	Average	24.000	5.315		
	High	21.056	4.518		
Hammer Knowledge					
Middle	Low	6.167	2.443	2/71	0.5780
	Average	6.818	1.776		
	High	6.483	1.805		
Upper	Low	7.643	1.692	2/45	3.3167*
	Average	7.353	1.693		
	High	8.588	0.870		
Hammer Attitude					
Middle	Low	12.000	3.357	2/71	0.4063
	Average	12.909	3.166		
	High	13.103	4.161		
Upper	Low	12.857	3.207	2/45	1.8460
	Average	10.706	3.754		
	High	11.118	2.690		

Table 3 (continued)

Variable	IQ Group	Mean	Standard Deviation	df	F
Hammer Performance					
Middle	Low	25.750	5.242	2/71	0.4852
	Average	23.667	5.914		
	High	24.069	7.086		
Upper	Low	26.786	4.677	2/44	0.9641
	Average	26.750	4.683		
	High	25.000	3.162		
Safety Knowledge					
Middle	Low	7.154	2.882	2/72	2.2639
	Average	8.441	1.673		
	High	8.071	1.438		
Upper	Low	9.538	0.877	2/44	0.1692
	Average	9.375	0.719		
	High	9.444	0.705		
Safety Attitude					
Middle	Low	13.846	2.304	2/72	1.2578
	Average	14.735	2.666		
	High	15.321	3.111		
Upper	Low	15.846	2.734	2/44	0.9002
	Average	14.750	2.176		
	High	15.889	3.104		
Wood Knowledge					
Middle	Low	3.769	1.423	2/71	0.2844
	Average	4.088	1.443		
	High	3.852	1.680		
Upper	Low	4.385	0.961	2/44	3.7008*
	Average	4.500	1.592		
	High	5.556	1.381		
Wood Attitude					
Middle	Low	13.538	2.817	2/71	0.3980
	Average	13.912	3.241		
	High	13.074	4.385		
Upper	Low	14.077	3.685	2/44	2.1161
	Average	11.500	3.263		
	High	13.167	3.451		

* $p < .05$

to intelligence level for the upper grades on three of the four knowledge tests, saw, hammer and wood knowledge. The above average students have higher mean scores on the knowledge tests than the average or below average students. There are no significant differences between the means of the average and below average students. It should be noted that there are no significant differences on attitude or performance skill dimensions by intelligence level. Teachers can expect the brighter students to score higher than others on pencil and paper achievement tests; however, level of intelligence is not a factor in skill performance or attitude toward industrial arts activities. Teachers should guard about labeling students on the basis of IQ or having expectations or set that might influence lower or higher groups negatively.

Comparison of Sex Differences on Knowledge, Attitude and Skill Performance Tests

Comparisons of the means by sex were made on all of the scales for both the middle grade and upper grade groups. The results of the comparisons are presented in Table 4. There were sex differences on six of the ten measures at the middle grade level. Boys scored significantly higher than girls on saw attitude, saw performance, hammer attitude, hammer performance and wood attitude (all at the .001 level) and on saw knowledge (at the .05 level). There were no significant differences on safety knowledge, hammer knowledge, wood knowledge and safety attitude.

Table 4

t Tests of the Means of Selected Performance Skills, Cognitive and Affective Measures for Middle Grade and Upper Grade Students by Sex

Variable Group	Sex	Mean	Standard Deviation	d.f.	t
Saw Knowledge					
Middle	Male	7.073	2.005	85	2.2146*
	Female	6.152	1.873		
Upper	Male	8.067	1.780	58	1.7414
	Female	7.233	1.924		
Saw Attitude					
Middle	Male	13.488	2.942	84	3.9359***
	Female	10.957	3.040		
Upper	Male	12.533	3.082	58	2.6988**
	Female	10.300	3.323		
Saw Performance					
Middle	Male	20.219	4.156	84	3.7869***
	Female	16.478	4.961		
Upper	Male	23.967	4.279	58	1.7107
	Female	21.800	5.461		
Hammer Knowledge					
Middle	Male	6.744	2.112	83	.8344
	Female	6.391	1.782		
Upper	Male	8.071	1.274	57	1.1964
	Female	7.613	1.626		
Hammer Attitude					
Middle	Male	14.410	3.050	82	4.5419***
	Female	11.304	3.217		
Upper	Male	12.643	3.423	57	3.4922***
	Female	9.774	2.883		
Hammer Performance					
Middle	Male	26.590	6.231	82	3.7760***
	Female	21.826	5.401		
Upper	Male	28.103	3.895	56	3.8867***
	Female	24.379	3.385		
Safety Knowledge					
Middle	Male	8.071	1.772	87	0.2469
	Female	8.167	1.906		
Upper	Male	9.069	1.132	55	2.9738**
	Female	9.750	0.441		

Table 4
(continued)

Variable Group	Sex	Mean	Standard Deviation	d.f.	t
Safety Attitude					
Middle	Male	15.476	2.865	87	1.9831
	Female	14.313	2.699		
Upper	Male	15.700	2.292	56	0.6067
	Female	15.286	2.891		
Wood Knowledge					
Middle	Male	4.293	1.309	86	1.5289
	Female	3.813	1.607		
Upper	Male	4.700	1.643	55	0.1782
	Female	4.630	1.305		
Wood Attitude					
Middle	Male	15.488	3.257	86	5.6795***
	Female	11.750	2.950		
Upper	Male	14.100	3.133	55	3.8350***
	Female	11.000	2.948		

* $p < .05$
** $p < .01$
*** $p < .001$

There were sex differences on five of the scales at the upper grade level. Boys had significantly higher mean scores on three of the attitude scales, saw attitude ($p < .01$), hammer attitude ($p < .001$) and wood attitude ($p < .001$). Boys also had higher performance ratings on hammer performance ($p < .001$). Girls had higher mean scores on the safety knowledge test ($p < .01$). There were no sex differences on the saw knowledge or performance tests, hammer knowledge, safety attitude, and wood knowledge skills.

There tend to be fewer sex differences on the knowledge scales and most differences on the attitude scales. Partly these differences may be due to role stereotyping. Earlier experiences with industrial arts programs and a career education program in the elementary grades may help to modify these attitudes. The lack of differences on the knowledge variables and, in one case, higher scores by girls again reflect traditional role expectations and higher achievement motivation on the part of girls.

Grade Level and Knowledge, Attitude and Skill Performance on Selected Industrial Arts Objectives

Comparisons of the variables by grade level were also made and reported in Table 5. There were significant differences by grade on three of the four knowledge tests, saw, hammer and safety. Students in the upper grades (8, 7, 6) scored higher than students in grades 4 and 5. There were significant differences only on one of the four attitude tests, hammer attitude. Students in the lower grades (4, 5, 6) had more positive attitudes than students in grade 7. There were significant differences between the performance ratings of students in the hammer ($p < .05$) and sawing tasks ($p < .01$). There were few significant differences on the

Table 5

Analysis of Variance and Duncan's Multiple Range Test of Selected Industrial Arts Variables by Grade Level

Variable	Grade	Mean	Standard Deviation	F	d.f.	Critical Diff Duncan's .05
Saw Knowledge	4	5.5333	1.8333	9.62**	4/143	
	5	7.0690	2.1865			8>4,8>7
	6	7.3103	1.4905			8>5,8>6
	7	6.9000	2.0060			6>4,5>4
	8	8.4000	1.4288			7>4
Saw Attitude	4	12.133	3.6928	0.66	4/143	
	5	12.138	2.9487			
	6	12.034	3.1564			
	7	10.967	3.3578			
	8	11.867	3.3808			
Saw Performance	4	16.033	4.3110	12.33**	4/143	7>4,7>5
	5	18.034	4.8586			7>6,8>4
	6	20.621	4.6323			8>5,6>4
	7	23.533	5.1175			6>5
	8	22.233	4.8472			
Hammer Knowledge	4	5.6207	2.0944	9.02**	4/140	8>4,8>5
	5	6.9643	1.9528			8>6,7>4
	6	7.1034	1.3455			6>4,5>4
	7	7.5000	1.6135			
	8	8.1724	1.2555			
Hammer Attitude	4	12.655	4.3118	2.71*	4/140	6>7,4>7
	5	12.643	3.1295			5>7
	6	12.966	2.9336			
	7	10.367	3.5862			
	8	11.931	3.1502			
Hammer Performance	4	22.931	6.2217	2.65*	4/139	8>4,8>6
	5	25.821	5.9694			
	6	23.448	6.2541			
	7	25.821	3.9068			
	8	26.633	4.2547			

Table 5
(continued)

Variable	Grade	Mean	Standard Deviation	F	d.f.	Critical Diff Duncan's .05
Safety Knowledge	4	7.3438	1.7890	13.24**	4/143	7>4,7>5
	5	8.0000	2.0702			8>4,8>5
	6	9.1333	1.0743			6>4,6>5
	7	9.6552	0.5526			
	8	9.1429	1.1455			
Safety Attitude	4	14.781	3.7908	0.55	4/144	
	5	14.724	2.1530			
	6	15.100	2.1392			
	7	15.448	2.3541			
	8	15.552	2.8358			
Wood Achievement	4	3.9032	1.3001	1.81		
	5	4.0690	1.6676			
	6	4.1667	1.5105			
	7	4.5000	1.3744			
	8	4.8276	1.5827			
Wood Attitude	4	12.161	4.3901	2.43	4/142	
	5	14.034	2.8721			
	6	14.433	3.0136			
	7	12.571	3.8914			
	8	12.690	2.9167			

* $p < .05$
** $p < .01$

the less complicated hammer task but more on the more complicated saw task. Students in the upper grades (6,7,8) had higher ratings than students in grades 4 and 5.

Sawing is a more complicated psychomotor task and maturation is clearly an important variable. Attitude is relatively independent of grade level. Students in the upper grades have wider knowledge and greater attention span and task orientation than students in the lower grades. Teachers would need to use more physical and intellectual guidance to help younger students learn the more complex psychomotor skills and direct their attention to the important knowledge to be gained in the lesson.

Prediction of Skill Performance

The question that can be asked is what variables best predict skill performance. A stepwise multiple regression analysis was run to answer this question with hammer performance as well as saw performance. The results of the analysis of saw performance are presented in Table 6. Twenty-two independent variables out of the 27 tried were included in the analysis.[1] A multiple R of .884 was computed for these variables and accounted for 78.2 percent of the variance. The best single predictor of saw performance was saw attitude which contributed 13.99 percent of the variance. On the final step, five variables were significant at the .01 level and one at the .05. These were respectively saw attitude, wood attitude, sex, grade, age and general attitude. The second variable to be included was wood attitude which accounted for 11.67 percent of the variance. Sex contributed 10.91 percent,

[1] Five were rejected because the F-level or tolerance-level was insufficient for further computation.

TABLE 6

STEPWISE MULTIPLE REGRESSION ANALYSES FOR PREDICTING SAW PERFORMANCE OF ELEM
STUDENTS, GRADES 4 TO 8, FROM SELECTED
COGNITIVE AND AFFECTIVE VARIABLES

	Multiple R	R Square	RSQ Change	Simple R	B
SAW ATTITUDE	0.37407	0.13993	0.13993	0.37407	0.9707
WOOD ATTITUDE	0.50666	0.25671	0.11678	-0.13955	-1.1122
SEX	0.60488	0.36588	0.10918	-0.22775	-3.9783
SAFETY KNOWLEDGE	0.70276	0.49387	0.12799	0.20017	0.1049
PEER	0.73133	0.53485	0.04097	-0.27530	-0.3226
ROLE EXPECTANCY	0.75111	0.56416	0.02932	0.27051	0.1145
GENERAL ATTITUDE	0.76603	0.58680	0.02263	-0.16746	-1.4499
GROUP	0.77904	0.60690	0.02011	0.23389	0.9531
GRADE	0.79510	0.63218	0.02527	0.24962	9.7549
AGE	0.84786	0.71887	0.08670	0.03842	-5.6804
SCHOOL CLIMATE	0.85405	0.72941	0.01053	-0.18501	0.7573
LORGE-THORNDIKE-VERBAL	0.86170	0.74252	0.01312	0.07711	-0.1524
LORGE-THORNDIKE-NONVERBAL	0.86626	0.75041	0.00788	0.12033	0.0557
SAW KNOWLEDGE	0.87084	0.75837	0.00796	0.16875	0.2352
ACHIEVEMENT INVESTMENT	0.87384	0.76360	0.00523	0.05933	0.1441
MODE OF INSTRUCTION	0.87584	0.76710	0.00350	-0.23288	-0.4095
INTERPERSONAL RELATIONS	0.87884	0.77236	0.00526	0.05149	-0.9983
SELF ADEQUACY	0.88119	0.77650	0.00415	0.11059	0.1441
COG STYLE	0.88345	0.78049	0.00399	-0.03102	0.0180
FAILURE AVOIDANCE	0.88424	0.78188	0.00138	0.02214	-0.0736
SAFETY ATTITUDE	0.88438	0.78213	0.00026	-0.02002	0.1006
WOOD KNOWLEDGE	0.88454	0.78241	0.00028	0.16652	0.1202
					36.5088

* p .05
** p .01

TABLE 6

PLE REGRESSION ANALYSES FOR PREDICTING SAW PERFORMANCE OF ELEMENTARY GRADE STUDENTS, GRADES 4 TO 8, FROM SELECTED COGNITIVE AND AFFECTIVE VARIABLES

	Multiple R	R Square	RSQ Change	Simple R	B	F at Final Step
	0.37407	0.13993	0.13993	0.37407	0.97074	10.235**
	0.50666	0.25671	0.11678	-0.13955	-1.11225	8.664**
	0.60488	0.36588	0.10918	-0.22775	-3.97832	4.526**
GE	0.70276	0.49387	0.12799	0.20017	0.10495	.030
	0.73133	0.53485	0.04097	-0.27530	-0.32263	.270
Y	0.75111	0.56416	0.02932	0.27051	0.11452	.189
DE	0.76603	0.58680	0.02263	-0.16746	-1.44999	2.559*
	0.77904	0.60690	0.02011	0.23389	0.95317	.240
	0.79510	0.63218	0.02527	0.24962	9.75496	5.816**
	0.84786	0.71887	0.08670	0.03842	-5.68044	5.066**
	0.85405	0.72941	0.01053	-0.18501	0.75734	2.019
E-VERBAL	0.86170	0.74252	0.01312	0.07711	-0.15243	1.686
E-NONVERBAL	0.86626	0.75041	0.00788	0.12033	0.05570	.382
	0.87084	0.75837	0.00796	0.16875	0.23522	.154
VESTMENT	0.87384	0.76360	0.00523	0.05933	0.14412	.526
CTION	0.87584	0.76710	0.00350	-0.23288	-0.40957	.623
RELATIONS	0.87884	0.77236	0.00526	0.05149	-0.99830	.571
	0.88119	0.77650	0.00415	0.11059	0.14414	.232
	0.88345	0.78049	0.00399	-0.03102	0.01807	.353
NCE	0.88424	0.78188	0.00138	0.02214	-0.07362	.141
E	0.88438	0.78213	0.00026	-0.02002	0.10064	.033
	0.88454	0.78241	0.00028	0.16652	0.12024	.020
					36.50884	

Peer attitude from the School Sentiment Inventory 4.09 percent, and Role Expectance from the SCAMIN 2.93 percent. General Attitude from the SSI added another 2.26 percent. Group membership, whether the student had hands on practice or not, contributed 2.01 percent; Grade, another 2.32 percent. Age accounted for more variance, 8.67 percent. School Climate on the SSI and the Lorge-Thorndike verbal scale added each slightly over one percent of variance to the prediction of saw performance. The remaining variables showed a unique variance of less than one percent.

In analyzing the contribution of the various variables in predicting saw performance, affective variables such as industrial arts attitudes (saw attitude, wood attitude) accounted for 25.67 percent of the variance; physical factors such as sex, 10.9 percent of the variance; Maturational variables such as age and grade 11.19 percent of the variance; Attitude toward School, an affective variable (General Attitude, School Climate, Mode of Instruction, Interpersonal Relations), 4.5 percent of the variance. Scholastic aptitude (The Lorge-Thorndike Scales) added 2.1 percent of unique variance while self concept supplied 3.5 percent. Knowledge of industrial arts objectives (Safety and Saw Knowledge) contributed 13.5 percent.

The affective variables tend to be more important than the cognitive predictors in predicting saw performance. Maturational and physical factors also are important variables.

Teachers need to stress more the affective goals and possibly place less emphasis on the traditional cognitive components. In planning instructional sequences, the teacher needs to be concerned with the entry behavior or characteristics of the students such as their maturation and readiness.

Scholastic Aptitude as measured by the Lorge-Thorndike non-verbal scale represented 2.59 percent of the variance, Academic Self Concept variables combined, 1.82 percent.

Again maturational and physical variables need to be considered by the teacher when preparing an instructional sequence.

The instructional strategy used does make a difference in skill performance. "Hands-on" experience does aid the student in mastering a skill.

The teacher needs to be aware of the importance of the learning style of a student. Field independent students tend to prefer structured situations and are less socially concerned about the learning environment and tend to perform better on industrial arts activities.

Hammer Performance was the second skill to be analyzed. A multiple correlation of .9075 was achieved based upon the use of 22 out of the 27 variables entered. The results of the analysis are presented in Table 7. Five of the variables were not included because the F-level or tolerance level was insufficient for further computation. The variables accounted for 82.36 percent of the variance. On the final step, five variables were significant at the .01 level, sex, cognitive style, wood knowledge, hammer knowledge and instructional group. Seven were significant at the .05 level, wood attitude, safety knowledge, motivation score on the SCAMIN, safety attitude, the Authority and Control and Mode of Instruction scales on the SSI and the Lorge-Thorndike Non-Verbal scale. The first variable entered was sex which contributed 26.04 percent of the variance. Cognitive style added 15.59 more percent. The wood knowledge test had a unique

variance of 7.47 percent. The instructional treatment of having "hands on" experience added an additional 4.76 more variance. Occupational knowledge and safety knowledge each had a three percent contribution.

In analyzing the variables, physical variables such as sex contributed the largest single amount of variance, 26.03 percent. A maturational variable such as grade was not significant and added less than 1% of variance. A learning style variable, cognitive style, contributed 15.58 percent of the variance. Field independent students tend to perform the skill of hammering better than field dependent students. Field independent students prefer to work in structured situations. Knowledge variables (hammer, wood, safety, and occupational) totaled 11.17 percent of the variance; attitude variables (wood attitude, SSI: General Attitude, Safety Attitude, SSI: Authority and Control, SSI: Mode of Instruction and Hammer Attitude, SSI: Interpersonal Relations) added 18.06 to the prediction of the skill of hammering.

TABLE 7

Multiple Stepwise Regression Analysis for Predicting Hammer Skill Performance
Students by use of Cognitive, Affective, and other Selected Variable

Variable	Multiple R	R Square	RSQ Change	Simple R
Sex	0.51025	0.26036	0.36046	-0.51025
Cognitive Style	0.64515	0.41622	0.16687	-0.40994
Wood Attitude	0.70067	0.49094	0.07573	0.03018
Wood Knowledge	0.72531	0.52607	0.04614	-0.02163
Group	0.75747	0.57376	0.04769	0.06009
Occupational Knowledge	0.78295	0.61302	0.03925	0.14073
Safety Knowledge	0.80542	0.64871	0.03569	-0.16026
Interpersonal Relations	0.81911	0.67095	0.02224	-0.15039
School Climate	0.83694	0.70047	0.02953	0.15274
General Attitude	0.84514	0.71427	0.01380	-0.07063
Hammer Knowledge	0.85093	0.72409	0.00982	-0.00182
Total Motivation	0.85677	0.73406	0.00997	-0.02094
Safety Attitude	0.86459	0.74751	0.01345	-0.03546
Authority and Control	0.87321	0.76250	0.01499	0.15234
Self Adequacy	0.87932	0.77321	0.01071	0.17264
Mode of Instruction	0.88573	0.78451	0.01130	-0.01921
Lorge-Thorndike-Nonverbal	0.90027	0.81049	0.02598	-0.03979
Learning	0.90309	0.81557	0.00508	-0.00920
Role Expectancy	0.90514	0.81928	0.00371	0.19863
Failure Avoidance	0.90674	0.82218	0.00290	-0.06703
Hammer Attitude	0.90720	0.82302	0.00084	0.20200
Grade	0.90756	0.82367	0.00065	-0.04417

TABLE 7

e Regression Analysis for Predicting Hammer Skill Performance of Grades 4 to 8
ts by use of Cognitive, Affective, and other Selected Variables

	Multiple R	R Square	RSQ Change	Simple R	F at Final Step	B
	0.51025	0.26036	0.36046	-0.51025	28.930**	-9.74911
	0.64515	0.41622	0.16687	-0.40994	14.919**	-0.12958
	0.70067	0.49094	0.07573	0.03018	3.318*	-0.66590
	0.72531	0.52607	0.04614	-0.02163	6.999**	-2.06931
	0.75747	0.57376	0.04769	0.06009	4.197**	3.52229
e	0.78295	0.61302	0.03925	0.14073	1.332	0.14989
	0.80542	0.64871	0.03569	-0.16026	2.234*	-0.85842
ns	0.81911	0.67095	0.02224	-0.15039	0.481	-0.61805
	0.83694	0.70047	0.02953	0.15274	0.621	0.39918
	0.84514	0.71427	0.01380	-0.07063	0.132	0.29253
	0.85093	0.72409	0.00982	-0.00182	4.837**	1.66242
	0.85677	0.73406	0.00997	-0.02094	2.393*	0.35357
	0.86459	0.74751	0.01345	-0.03546	2.727*	-1.01612
	0.87321	0.76250	0.01499	0.15234	3.694*	1.34888
	0.87932	0.77321	0.01071	0.17264	1.499	-0.30783
	0.88573	0.78451	0.01130	-0.01921	3.051*	-0.85812
rbal	0.90027	0.81049	0.02598	-0.03979	2.700*	-0.12228
	0.90309	0.81557	0.00508	-0.00920	0.838	0.78501
	0.90514	0.81928	0.00371	0.19863	0.528	-0.20817
	0.90674	0.82218	0.00290	-0.06703	0.253	-0.14753
	0.90720	0.82302	0.00084	0.20200	0.064	0.08725
	0.90756	0.82367	0.00065	-0.04417	0.059	-0.50818
						60.48129

Relationships Between Cognitive, Affective Skill Performance and Variables

The means, standard deviations, and Pearson Product Moment correlations between the knowledge, attitude and performance tests are presented in Table 8. The first comparison to be discussed is the relationship between attitude and knowledge. In three of the four direct comparisons (Saw Knowledge - Saw Attitude; Hammer Knowledge-Hammer Performance, Safety Knowledge-Safety Attitude; Wood Knowledge-Wood Attitude) the correlations were significantly different than chance. Two were significant at the .05 level, hammer knowledge and hammer attitude, wood knowledge and wood attitude while one was significant at the .001 level, safety knowledge and safety performance. The correlations show a low positive relationship between these categories of variables. This would indicate that there is not much relationship, little common variance, between knowledge and attitude on these variables.

The second comparison to be discussed is the relationship between knowledge and skill performance. A correlation of .2565 significant at the .001 level was found between saw knowledge and performance, while a correlation of .1194 was computed between hammer knowledge and performance. For the more complex task a low but positive correlation exists between knowledge and attitude indicating that there is a slight tendency for students who have more knowledge to tend to perform better.

The third comparison to be studied is the relationship of attitude to skill performance. There was a significant relationship

between saw attitude and saw performance (.2206, $p < .01$) but not with hammer attitude and performance (.1248, N.S.). The relationship between saw attitude and saw performance is low but positive indicating that there is a slight tendency for students who perform better to have more positive attitudes and vice versa.

The next series question that can be asked are: What are the relationships between the four attitude scales? and What is the relationship between the two skill performance tests? There are six comparisons that can be made between knowledge tests. The correlations ranged from a high of .4721 between saw knowledge and hammer knowledge to a low of .2549 between wood knowledge and safety knowledge. Five of the six comparisons were significant at the .001 level, the lowest at the .01 level. The relationships were moderate but positive. The results would indicate that certain students tended to score consistently high on all tests, certain students consistently low. Possibly this is true of the student performances in other achievement areas in school too.

There are also six comparisons that can be made between the four attitude scales. All six comparisons are significant at the .001 level and range from a low of .3479 between hammer and safety attitude to a high of .6967 between saw and hammer knowledge. The relationship between the variables is substantial. Students who tend to have positive attitude toward one activity tend to have positive attitude toward all activities. Those having less positive attitude toward one activity tend to have it towards all the other activities.

Table 8

CORRELATIONS BETWEEN KNOWLEDGE, ATTITUDE AND PERFORMA
UNSELECTED INDUSTRIAL ARTS OBJECTIVES FOR STUDENTS IN GRA

Variables	Saw		Hammer			Safety		Wood	
	Attitude	Perf	Know	Att	Perf	Know	Att	Know	At
Saw Knowledge	-0163	2565**	4721***	0474	1561	4155***	0718	2999***	16
Saw Attitude		2206**	2800***	6967***	0891	-0699	4297***	1321	54
Saw Performance			2737***	1033	3640***	2897***	1522	2451**	19
Hammer Knowledge				1760*	1194	4645***	2813***	3035***	32
Hammer Attitude					1248	-1005	3479***	1218	61
Hammer Performance						-0016	0519	1318	22
Safety Knowledge							2623***	2549**	12
Safety Attitude								0679	51
Wood Knowledge									17
Wood Attitude									

* $p < 05$

** $p < 01$

*** $p < 001$

Table 8

CORRELATIONS BETWEEN KNOWLEDGE, ATTITUDE AND PERFORMANCE
UNSELECTED INDUSTRIAL ARTS OBJECTIVES FOR STUDENTS IN GRADES 4 TO 8

Saw		Hammer			Safety		Wood			Stand.
titude	Perf	Know	Att	Perf	Know	Att	Know	Att	Mean	Dev.
163	2565**	4721***	0474	1561	4155***	0718	2999***	1644	7.075	1.860
	2206**	2800***	6967***	0891	-0699	4297***	1321	5434***	11.824	3.304
		2737***	1033	3640***	2897***	1522	2451**	1952*	20.101	5.445
			1760*	1194	4645***	2813***	3035***	3223***	7.075	1.860
				1248	-1005	3479***	1218	6105***	12.096	3.542
					-0016	0519	1318	2279**	24.930	5.540
						2623***	2549**	1222	8.628	1.663
							0679	5104***	15.114	2.732
								1787*	4.285	1.508
									13.176	3.547

p < 05

p < 01

p < 001

The last relationship to be discussed is that between the two skills. The correlation between hammer and saw performance is .2565 ($p > .01$). The relationship is low but positive. There is a slight tendency for students showing skill in the one area to perform well in the other.

Factor Structure of Cognitive, Affective and Skill Variables

Another way of looking at the relationship between the many variables used in the study is through the use of factor analysis. Six factors were extracted with an eigen value of one or greater and these accounted for 89.4 percent of the variance.

The first factor accounted for 41.3 percent of the variance and had an eigen value of 8.520. Thirteen variables had loadings greater than .42. The factor is labeled scholastic achievement. The five subtests of the Iowa Test of Basic Skills had the highest loadings, all .8 or above. The variables and loadings are presented in Table 9. All of the knowledge tests for the experiment as well as the Knowledge of Occupations Test had moderately high loadings.

The second factor accounted for 17.0 percent of the variance and had an eigen value of 3.509. The variables with loadings of .4 and higher are listed in Table 10. The factor is labeled attitude toward industrial arts activities. The saw attitude, hammer attitude, safety attitude and wood attitude scales had loadings from a low of .619 for safety attitude to a high of .789 for wood attitude.

Table 9

Factor 1: Scholastic Achievement

Variables	Loading
Age	661
Grade	814
Saw Knowledge	525
Hammer Knowledge	567
Safety Knowledge	602
Occupational Knowledge	718
Lorge Thorndike Non-verbal	441
Vocabulary ITBS	895
Reading Comprehension ITBS	888
Total Language ITBS	877
Total Work Study Skills ITBS	927
Total Arithmetic	901

Table 10

Factor 2: Industrial Arts Attitude

Variables	Loading
Saw Attitude	764
Hammer Attitude	708
Safety Attitude	619
Wood Attitude	789

The third factor accounted for 13.3 percent of the variance and had an eigen value of 2.750. There were three scales that had significant loadings. These are listed in Table 11.

Table 11

Factor 3: Academic Self-Concept

Variables	Loading
Achievement needs	762
Role Expectancy	877
Self-Adequacy	771

Three of the four scales of the Self Concept and Motivation Inventory had high loadings on this factor.

The fourth factor is labeled scholastic aptitude and accounted for 6.5 percent of the variance and had an eigen value of 1.345. The scales with significant loadings are described in Table 12.

Table 12

Factor 4: Scholastic Aptitude

Variables	Loading
Lorge Thorndike Verbal	801
Lorge Thorndike Non-Verbal	793

The two subscales of the Lorge-Thorndike Intelligence Test contributed the largest amount of variance.

The fifth factor accounted for 6.3 percent of the variance and is described in Table 13.

Table 13

Factor 5: Attitude toward School

Variables	Loading
School Sentiment Inventory: Peers	505
SSI: Interpersonal Relationship w/ Pupils	440
SSI: Mode of Instruction	611

The three scales with significant loadings all are from the School Sentiment Inventory. The factor is labeled: Attitude toward School.

The sixth factor accounted for 4.9 percent of the variance and had an eigen value of 1.008. Only three variables had loadings of .40 or greater. These are listed in Table 14. Two of the variables are the skill performance variables. The factor is labeled skill performance.

Table 14

Factor 6: Skill Performance

Variables	Loading
Saw Performance	410
Hammer Performance	578
Sex	- 717

The seventh factor that accounted for 4.4 percent of the variance but had an eigen value of .9 was cognitive style. The learning style variable had a loading .820 on the factor and was the only one equal to or greater than .40.

In summary, the results tend to indicate that there are a number of separate dimensions that should be considered by teachers as well as researchers in the field.

These are as follows:

Scholastic Achievement

Attitude Toward Industrial Arts

Academic Self Concept

Scholastic Aptitude

Attitude Toward School

Skill Performance

Learning Style

The first factor extracted was an achievement factor which included the pencil and paper achievement scales both scholastic as well as relating to the industrial arts skills. Previous achievement as well as achievement in other subject areas tend to correlate together. Students who are successful academically in other areas tend to make the higher scores on traditional pencil and paper tests in industrial arts area.

The second largest factor was attitude toward the industrial arts objectives used in the project. It should be noted that this attitude cluster was more or less independent of general school attitude. No scales on the School Sentiment Inventory loaded on this factor. Teachers need to be concerned in developing and fostering attitudes toward their industrial arts program.

The third variable is also included in the Affective Domain, Academic Self-Concept. Developing and maintaining positive self concept of the student is also a necessary goal of the industrial arts teacher.

The fourth factor is the academic aptitude.

The fifth factor is attitude toward school and the sixth is skill performance.

It should be noted that knowledge, attitude and skill performance all have significant loadings on different factors. The teacher must recognize that there are different dimensions of the task and include cognitive, affective and psychomotor objectives in the units of study.

In analyzing the factors from another point of view, only two of the factors were from the Cognitive Domain or Intellective, academic achievement and academic aptitude. These factors accounted for 47.8 percent of the variance. Four of the factors extracted were from the Affective Domain: Industrial Arts Attitude, Academic Self Concept, Attitude Toward School, and Attitude Toward School Environment (not discussed in previous section because the factor had an eigen value less than one). The last area which contributed significant variance and would be classified in the psychomotor domain was skill performance which contributed 4.9 percent of the variance.

Summary of Statistical Results

The first research question was whether skill performance introduced by a film and then followed by practice, hands-on experience, leads to better mastery of a psychomotor skill than when the film is presented without practice. There were mean differences found both for the middle grade group and upper grade group on saw performance but not on hammer performance. The groups which had practice had higher mean scores than the groups who just saw the film and were tested.

Two ways of presenting the films were also tried. For two of the films, Selecting Wood and Shop Safety, one group was involved in group discussions prior to the use of the films while the other group was only shown the film. There was a significant difference on one of the tests, wood knowledge. The group who were presented information about selecting wood prior to the film knew more about what to look for in the presentation and had a higher mean score. There were no differences on the safety tests or wood attitude test.

The performance of the students on the knowledge, attitude and skill performance tests was studied by IQ level. There were no significant differences between the means of the middle grade groups when broken down by level of intelligence on any of the knowledge, attitude or performance skill tests. There were three tests where significant differences were found by IQ level for the upper grade students: saw, hammer, and wood knowledge tests. There were no differences on any of the attitude or skill performance tests for either group by IQ level.

The performance of the students on the three types of tests was studied by sex membership. There were sex differences on six of the ten measures at the middle grade level. Boys scored significantly higher than girls on the saw, hammer and wood attitude tests, saw and hammer performance and on saw knowledge.

There were sex differences on five of the ten scales at the upper grade levels. Boys had higher means than girls on hammer, saw and wood attitude and hammer performance. Girls had higher means than boys on the safety knowledge test.

The performance of the students on the three types of tests was compared also by grade level. Significant differences between the means by grade were found on three of the four knowledge tests (saw, hammer, safety). Students in the upper grades had higher mean scores than students in the lower grades.

There were significant differences between student performance on the two tasks by grade. There were few differences in hammer performance but marked differences on saw performance. Students in the upper grades had significantly higher ratings than those in the lower grades. There was a significant difference between the means by grade on only one of the four attitude scales. Students in grades 4, 5 and 6 had a more positive attitude on the hammer attitude test than students in Grade 7.

The second series of research questions concerned the relationship between the variables. First of all the relationship between knowledge, attitude and skill performance was studied. There were significant correlations between knowledge and attitude

on three of the four variables. The correlations were positive but low. The second set of comparisons were between knowledge and skill performance. A significant relationship was found between saw knowledge and performance but not between hammer knowledge and performance. Again the relationship was positive but low. The third set of relationships were between attitude and skill performance. There was a significant relationship between saw attitude and performance but not between the two hammer measures. The relationship again was positive but low.

The factors which predict skill performance were identified through multiple stepwise regression. For predicting both saw and hammer performance twenty-seven independent variables were selected to be entered. A multiple correlation of .9075 was computed for hammer performance and .884 for saw performance. Five variables were significant at the .01 level in predicting hammer performance: sex, cognitive style, wood knowledge, hammer knowledge and instructional treatment. Seven were significant at the .05 level: wood attitude, safety knowledge, safety attitude, SCAMIN motivation, SSI Authority and Control and Mode of Instruction. Sex contributed 26.04 percent of the variance, cognitive style 15.5 and wood knowledge 7.47 and hands-on experience 4.76 percent. In predicting saw performance, saw attitude contributed 13.99 percent, wood attitude 11.67 percent, sex 10.91 percent, safety knowledge 12.79 percent, age 8.67 percent. Eighty-two percent of the variance was accounted for in predicting hammer performance and seventy-eight in predicting saw performance. Maturational, physical and affective predictors tended to contribute more unique variance than cognitive ones.

The commonality of the structure of the variables was studied by use of factor analysis. Six factors were extracted using the principal factor approach with orthogonial rotations with eigen values of one or greater which accounted for 89.4 percent of the variance.

The first factor was Scholastic Achievement which accounted for 41.3 percent of the variance. The second was Attitude toward Industrial Arts (17.0%); the Third, Academic Self Concept (13.3%); the fourth, Scholastic Aptitude, (6.5%), the fifth, Attitude toward School (6.3%); and the sixth, Skill Performance (4.9%).

Summary of Instructional Applications

Teachers utilizing films to introduce and teach more complex industrial arts skills may find immediate practice necessary for reinforcement of skills.

The use of advanced organizers and behavioral objectives in instruction help students focus attention on the required areas of knowledge.

Attitude change demands a more complex instructional strategy, especially attitudes toward industrial arts objectives which are a part of a new experience for most students.

Teachers can expect the brighter students intellectually to score higher than others on pencil and paper achievement tests; however, level of intelligence is not a factor in skill performance or attitude toward industrial arts activities.

Teachers should guard about labeling students on the basis of intelligence or having expectations or set that might influence lower or higher groups negatively.

Earlier experiences with industrial arts programs and a career education program in the elementary grades may help to modify the sex differences in attitude toward the industrial arts activities.

Attitude toward industrial arts activities is relatively independent of grade.

Teachers need to use more physical and intellectual guidance to help younger students learn the more complex psychomotor skills and direct their attention to the important knowledge to be gained in the lesson.

Teachers should recognize the importance of maturational and physical factors in teaching strategies used.

Teachers need to stress more the affective goals and possibly place less emphasis on the traditional cognitive ones.

In planning an instructional sequence, the teacher needs to be concerned with the entry behavior or characteristics of the students such as their maturation and readiness.

The instructional strategy used does make a difference in skill performance. "Hands-on" experience does aid a student in mastering a skill.

The teacher needs to be aware of the importance of the learning style of a student. Field independent students tend to prefer structured situations and are less socially concerned about the learning environment and tend to perform better on industrial arts activities.

Knowledge and attitude are separate dimensions and are slightly correlated. Instructional strategies need to include sets of affective as well as cognitive objectives.

Knowledge and performance are only slightly correlated. Although there is a tendency for students who have more knowledge to perform better, teachers should not expect performance to appear automatically without sufficient practice.

Attitude and performance are just slightly correlated. Stress has to be placed upon both dimensions by teachers.

Teachers need to recognize that skill on one activity might not transfer to another one unless similar cognitive and psychomotor skills are evident. Teachers need to stress similarities and stress transfer of training.

Students who are successful academically, tend to make high scores also on knowledge tests of industrial arts objectives.

Attitude toward school and attitude toward industrial arts activities are independent or different dimensions. Teachers need to be concerned in developing and fostering positive attitudes toward their industrial arts programs.

The teacher needs to recognize that knowledge, attitude and skill performance are different dimensions as well as the self concept and learning style of the student. The teachers should make sure he makes a thorough analysis of the skills they are teaching as well as the characteristics of the students they have.

Developing and maintaining positive self-concept of the student is also a necessary goal of the industrial arts teacher.

Implications

Implications can be made from the results of this study for teachers and administrators and for curriculum or program:

Teachers

1. Practice or hands-on experience facilitates mastery of more complex skills.
2. Advanced organizers and/or behavioral objectives communicated to the students provide students the intellectual guidance they need in learning more complex information or tasks.
3. Films alone might lead to communication of certain types of information; however, films followed by practice better lead to mastery of more complex psychomotor skills.
4. Providing students advanced organizers or behavioral objectives prior to film presentation will lead to greater mastery of more complicated cognitive material.
5. Teachers who make task or goal analysis of what they are teaching and are able to identify the pre-requisite behaviors will have greater success in instruction.
6. The instructional strategies based upon the entry level of the students and their characteristics will be more successful.
7. Less mature students require more physical and intellectual guidance in learning complex tasks.
8. Affective variables such as attitude toward specific programs and general attitude toward school as well as self-concept are important variables in predicting a student's success in a program.
9. Stereotyped concepts concerning intelligence and sex role can interfere with teaching success and student performance.

10. Learning style of the students needs to be considered in devising the instructional program.

Administrators

1. Homogeneous ability grouping is not necessary for industrial arts programs in the elementary grades.
2. Students can successfully perform industrial arts skills at early grade levels thatn the program is normally introduced.
3. School environment and climate are important variables in formulating student attitude and self-concept.

Curriculum

1. There should be affective goals and objectives stated as well as cognitive.
2. The suggested activities should take into consideration differences in learning style, readiness and other such factors.
3. Curriculum guides need to provide hands on experiences as well as illustrations to show the application of what is taught, where it can be transferred and how.

Recommendations

Recommendations from the results of the study are made for the State Department of Educational and Cultural Services, for pre-service and in-service education of teachers, for administrators, for curriculum development, and for further research.

State Department of Educational and Cultural Services

1. That the Department continue to sponsor research in the areas of learning strategies and teaching effectiveness.
2. That the Department sponsor workshops in understanding and writing objectives in the affective and psychomotor domains for teachers and administrators.
3. That the Department consider providing curriculum guides for the inclusion of industrial arts objectives earlier in the school program in order to help do away with sex stereotyping in educational and career areas.

Pre-service and In-service Education of Teachers

1. More emphasis needs to be placed upon the application of learning theory to classroom practices in pre-service programs.
2. Teachers need to have supervised experience in identifying, writing and utilizing objectives in the affective and psychomotor areas.
3. There needs to be more experiences arranged so teachers can translate theory into practice.
4. Teachers should have training in task analysis and systems approach to learning and teaching.
5. Teachers should become familiar with recognizing and identifying different types of learning styles and the prescriptive activities which best relate to these styles.
6. Teachers be given guidance to have repetories of activities that children can utilize to get "hands-on" experiences and be able to transfer what is learned.

Administrators

1. Administrators should support and participate in the in-service programs suggested.
2. They should support curriculum innovation and research.
3. They should recognize the importance of the school environment and pupil and public attitude toward school and provide the leadership to support a positive learning environment.
4. They should become familiar with writing performance objectives in affective, cognitive, as well as psychomotor areas.
5. They should give support to a program of career education with some laboratory experiences in the elementary grades.

Curriculum Developers

1. Curriculum materials should provide specific behavioral objectives, appropriate ones in all domains.
2. Different instructional strategies should be devised for students with different learning styles.
3. Suggestions for hands-on experiences, practice, and translation should be given.
4. Industrial arts objectives ought to be integrated in the curriculum prior to the upper grades.

Research

1. This type of study should be replicated on different types of populations; example: secondary students, vocational-technical students, etc.
2. Additional strategies should also be tested using other types of instructional media.
3. The effects of these experiences on immediate as well as delayed recall could be tested.
4. The relation of attitude to experience over time in industrial arts activities could be studied.
5. The relation to specific attitudes toward activities and general school attitude toward school and the school environment needs further research.

APPENDIX A

NAILS AND SCREWS

NAME _____ AGE _____ SEX _____

SCHOOL _____ GRADE _____

1. What type of nails are used when it is not necessary to conceal the heads?
   1. common
   2. finishing
   3. casing
   4. brads

2. What is the name of the unit used to describe the size of a nail?
   1. ounce
   2. pound
   3. penny
   4. inch

3. Which type of nail has the largest diameter?
   1. box
   2. common
   3. finishing
   4. casing

4. The part of the hammer used in pounding the nail is called
   1. the cheek
   2. the heal
   3. the head
   4. the face

5. The part of the hammer used in pulling nails is called
   1. the cheek
   2. the claw
   3. the head
   4. the face

6. In driving a nail, you should use
   1. many slow taps
   2. many fast taps
   3. a few solid blows
   4. a few light blows

7. If you want to insure that two pieces hold better together you should drive your nails
   1. straight
   2. at an angle
   3. in the same grain line
   4. completely through the two pieces of wood

8. If you wanted to increase the holding power of a small table you were building you should
   1. use common nails
   2. put in more nails than you would usually
   3. use screws
   4. use a nail set

9. To make screws or nails go into hard wood easier you should
   1. coat them with oil
   2. coat them with soap
   3. use a Phillip's screwdriver
   4. use a heavier hammer

10. The three parts of a screw are the
   1. cheek, head, toe
   2. heal, head, toe
   3. head, shank, thread
   4. head, cheek, thread

11. How do you like to work with nails and screws?
   1. not at all
   2. it is okay
   3. it is fun
   4. it is a lot of fun

12. How useful do you think it is to know about screws and nails?
   1. of no use
   2. of little use
   3. of some use
   4. of great use

13. Would you like to know more about types of nails and screws and how to use them?
   1. no, not interested
   2. not sure
   3. yes, I think so
   4. very much so

14. Are you planning to use either nails or screws in something you hope to make at home?
   1. no
   2. not sure
   3. probably yes
   4. definitely yes

15. Would you like to work in a job in which you would use nails and screws?
   1. definitely no
   2. not sure
   3. probably yes
   4. definitely yes

PERFORMANCE CHECKSHEET FOR THE HAMMER

NAME _____ AGE _____ SEX _____

SCHOOL _____ GRADE _____

1. PREPARATION FOR NAILING

1	2	3	4	5
carelessly determines where to nail				carefully determines where to nail

2. START OF NAIL

1	2	3	4	5
improper start				secures nail with a few short taps

3. MOVEMENT

1	2	3	4	5
uses improper movement				uses proper wrist, arm, & shoulder movement

4. ATTENTION

1	2	3	4	5
inattentive				keeps eye on nail

5. stroke of HAMMER

1	2	3	4	5
improper strokes				solid blows

6. GRASP OF HAMMER

1	2	3	4	5
improper grasp				proper grasp

OVERALL RATING OF PERFORMANCE

1	2	3	4	5
poor		average		excellent

SAW

NAME _____ AGE _____ SEX _____

SCHOOL _____ GRADE _____

1. What kind of saw do you use when you want to cut across the grain of the wood?
   1. coping saw
   2. cross cut saw
   3. keyhole saw
   4. rip saw

2. What kind of saw do you sue when you want to cut with the grain of the wood?
   1. coping saw
   2. crosscut saw
   3. keyhole saw
   4. rip saw

3. The cut made by the saw is called
   1. the heal
   2. the kerf
   3. the teeth
   4. the mider

4. What type of saw has its teeth bent alternately right and left
   1. coping saw
   2. cross cut saw
   3. rip saw
   4. band saw

5. At what angle do you hold the saw when cutting?
   1. 10°
   2. 25°
   3. 45°
   4. 90°

6. What saw do you use when you want to make curved cuts and designs on thin boards?
   1. cross cut saw
   2. coping saw
   3. rip saw
   4. back saw

7. What is the small end of the saw called?
   1. heal
   2. blade
   3. toe
   4. teeth

8. If you want to saw something, the first thing you should do is
   1. get the different types of saws ready
   2. mark the place to be cut with a square and fine pencil
   3. wipe the saw with an oily rag
   4. saw with rapid strokes at a 90° angle

9. When you start to make your cut, you should
   1. take short slow strokes with the heal of the saw
   2. take short slow strokes with the toe of the saw
   3. take fast strokes with the whole blade
   4. take slow strokes with the whole blade

10. When you are almost through the cut, you should
   1. make fast strokes with the saw
   2. make slower strokes with the saw
   3. cut from the other side
   4. change to a back saw

11. How do you like to saw?
   1. not at all
   2. it is okay
   3. it is fun
   4. it is alot of fun

12. How useful do you think it is to know about sawing?
   1. of no use
   2. of little use
   3. of some use
   4. of great use

13. Would you like to know more about types of saws and how to use them?
   1. no
   2. not sure
   3. yes, I think I would
   4. definitely yes

14. Would you like to take woodworking when you are in high school?
   1. no
   2. not sure
   3. yes, I think I would
   4. definitely yes

15. Do you plan to make woodworking a hobby or a career in the future?
   1. no
   2. not sure
   3. yes, I think I would
   4. definitely yes

CHECKSHEET FOR THE SAW

NAME _____ AGE _____ SEX _____

SCHOOL _____ GRADE _____

1. PREPARATION FOR SAWING

1	2	3	4	5
marks line carelessly with square				marks face as well as edge properly & carefully

2. START OF CUT

1	2	3	4	5
makes several improper starts				starts correctly with heel of saw

3. Grasp OF SAW

1	2	3	4	5
grasps saw improperly				has proper hand position

4. STROKES WITH SAW

1	2	3	4	5
saws improperly				proper beginning, middle & ending strokes

5. POSITION OF SAW

1	2	3	4	5
improper position and angle				proper angle and position

6. STRAIGHTNESS OF CUT

1	2	3	4	5
crooked				straight

7. OVERALL PERFORMANCE

1	2	3	4	5
poor		average		excellent

SAFETY

NAME _____ AGE _____ SEX _____

SCHOOL _____ GRADE _____

1. What type of clothing would be dangerous to wear in a shop?
   1. tie
   2. sweater
   3. short sleaved shirt
   4. apron

2. The most important product of the shop is
   1. finished wooden objects
   2. finished metal objects
   3. student achievement
   4. safety

3. The area around a work bench should
   1. be not marked because it is distracting
   2. open to observers as well as those working
   3. marked as an area for those individuals working
   4. close to other work areas

4. Which is not a characteristic of a safe shop?
   1. lumber stored in piles
   2. oily rags stored in cans
   3. people talking to their friends when they are working
   4. people wearing work aprons

5. It is essential in the shop to
   1. post safety records
   2. know safety rules
   3. use tools quickly so that others can use them
   4. know about the different kinds of wood

6. When using a hammer to pound a nail you should
   1. hold the nail with your fingers
   2. wipe the cheek of the hammer with an oily rag
   3. check the head of the hammer for dust and oil
   4. use rapid strokes

7. When using a chisel to cut wood you should
   1. cut toward you
   2. cut away from you
   3. cut sidewards
   4. cut using all three types of strokes

8. When carrying tools such as a chisel you should
   1. hold the point in your hand
   2. carry it in your pocket
   3. hold it in your fist horizontally
   4. hold the point down

9. If something is spilled on the floor you should
   1. wait and clean it up after class
   2. wipe it up immediately
   3. tell the shop teacher you spilled something
   4. do not worry about it

10. Safety is primarily the responsibility of
   1. the school district
   2. the teacher
   3. the principal
   4. the shop student

11. Safety is just as important at home as in school and shop
   1. definetly no
   2. not sure
   3. probably yes
   4. definitely yes

12. How useful do you think it is to know about shop safety
   1. of no use at all
   2. of little use
   3. of some use
   4. of great use

13. Would you like to have more discussion on safety in other classes
   1. no
   2. not sure
   3. yes
   4. definitely yes

14. Would you tell another student he should be careful if he were doing something that was unsafe in shop
   1. no
   2. not sure
   3. probably yes
   4. yes

15. Would you like to take shop courses in the future?
   1. no
   2. not sure
   3. probably yes
   4. definitely yes

WOOD

NAME _____ AGE _____ SEX _____

SCHOOL _____ GRADE _____

1. Wood that is cut tangent to the annual rings is called
   1. plain sawed
   2. rough sawed
   3. quarter sawed
   4. whole sawed

2. What type of cut is less likely to split?
   1. plain sawed
   2. rough sawed
   3. quarter sawed
   4. whole sawed

3. Wood cut in thin sheets is called
   1. dressed lumber
   2. dimension lumber
   3. worked lumber
   4. vaneer

4. What type of lumber is 2 to 5 inches thick and 2 or more inches wide
   1. board
   2. dimension
   3. timber
   4. post

5. Wood is classified by all of these <u>except</u>
   1. by tree
   2. by processing
   3. by size
   4. by color

6. When lumber is machined to smoothness and desired dimensions it is called
   1. rough
   2. dressed
   3. worked
   4. vaneer

7. Molding is sold by
   1. board foot
   2. linear foot
   3. both board and linear foot
   4. none of the above

3.. How many board feet does a 2" x 4' x 6' board contain?
   1. 2
   2. 4
   3. 6
   4. 8

9. Which of the following woods would be best to use to build outside patio furniture?
   1. redwood
   2. walnut
   3. white pine
   4. birch

10. Which of the following woods would be best to use to build kitchen cabinets?
   1. redwood
   2. walnut
   3. white pine
   4. birch

11. How useful do you think it is to know about woods?
   1. of no use
   2. of little use
   3. of some use
   4. of great use

12. Would you like to know more about types of wood and how to use it?
   1. no
   2. not sure
   3. yes, I think I would
   4. definitely yes

13. Do you like to work with wood?
   1. no
   2. not sure
   3. sometimes
   4. yes, I would like to spend more time at it

14. Are you planning to use wood in some kind of project you hope to do at home in the near future?
   1. no
   2. have nothing planned
   3. yes, hope to use some
   4. definitely yes

15. Would you like to do woodworking as a career or hobby?
   1. no
   2. not sure
   3. yes
   4. definitely yes

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ACCESSION NUMBER: VT102308

PUBLICATION DATE: 08MAR75

TITLE: READING FOR PROGRESS. A CONFERENCE ON PERSPECTIVES OF AND RECOMMENDATIONS FOR COUNTERING READING PROBLEMS IN HAWAII COUNTY (MARCH 8, 1975, HILO, HAWAII).

DESCRIPTOR: *CONFERENCE REPORTS; *READING DIFFICULTY; EDUCATIONAL PROGRAMS; *READING IMPROVEMENT

IDENTIFIER: HAWAII COUNTY; HAWAII

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 46P.

ABSTRACT: THIS CONFERENCE REPRESENTED A RE-FOCUS ON THE READING PROBLEMS OF THE YOUTH OF HAWAII COUNTY AS VIEWED BY EDUCATORS, THE BUSINESS AND LABOR COMMUNITY, SOCIAL AGENCIES, AND OTHER GOVERNMENT OFFICIALS. SOME RECOMMENDATIONS EMANATING FROM THE CONFERENCE ARE AS FOLLOWS: (1) ORGANIZE A GROUP REPRESENTING GOVERNMENT AGENCIES, THE SCHOOLS, BUSINESS AND COMMUNITY SEGMENTS TO COORDINATE AN EFFECTIVE READING PROGRAM; (2) SET STANDARDS FOR READING PROFICIENCY AND HOLD RESPONSIBLE AGENCIES AND PERSONS ACCOUNTABLE; (3) ESTABLISH A READING REFERRAL AND COORDINATION NETWORK, AND (4) PROVIDE PRESERVICE AND INSERVICE TEACHER TRAINING IN READING. TRANSCRIPTIONS OF THE CONFERENCE SPEECHES, PANEL PRESENTATIONS, AND GROUP DISCUSSIONS ARE INCLUDED IN THE REPORT. AN APPENDIX CONTAINS A COPY OF THE AGENDA, LIST OF PARTICIPANTS, AND EVALUATION OF THE CONFERENCE. (AUTHOR/NJ)

INSTITUTION NAME: HAWAII STATE DEPT. OF EDUCATION, HONOLULU. OFFICE OF THE DIRECTOR FOR VOCATIONAL EDUCATION.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

VT 102 308

READING FOR PROGRESS

CONFERENCE PROCEEDINGS AND SUMMARY RECOMMENDATIONS

saturday, march 8, 1975

waiakea resort village

hilo, hawaii

VT 102 308

Reading for Progress

A CONFERENCE ON PERSPECTIVES OF

AND RECOMMENDATIONS FOR COUNTERING

READING PROBLEMS IN HAWAII COUNTY

March 8, 1975

Waiakea Village Resort

The "Reading for Progress" Conference and this publication of its recommendations and proceedings were made possible by the Office of the Hawaii State Director for Vocational Education with funds provided under the Education Professions Development Act, Part F, 553, U.S. Office of Education, Department of Health, Education and Welfare.

FOREWORD

I am happy to mail you the proceedings of the READING FOR PROGRESS Conference held on Saturday, March 8, 1975.

The conference represented a re-focus on the reading problem of our youth as viewed by educators, business and labor community, social agencies, and other government officials both appointed and elected. The conference was meant to be "action" oriented with the anticipation that the public schools, community colleges, the University, governmental agencies, boards and commissions, and our legislators be stirred to carry forth the recommendations emanating from this conference and any subsequent meetings.

I hope that you will read this report with a vision to what the next logical step might be. A committee of business, labor, and education leaders has been formed to review the next process to keep the momentum rolling on resolving the reading problem faced by this community.

I am happy to report that, as a result of the conference, a number of activities have already taken place. The Department of Education, Hawaii District, has submitted a proposal to the federal government on the "Right to Read" project for secondary schools. Hawaii Community College, in cooperation with the community, has submitted a second "Right to Read" proposal for the adult community of the Big Island. Finally, through the efforts of Judge Shunichi Kimura, the "Home/School Tutor Program in Reading for Elementary Grades", funded through private donations, has been initiated.

Your suggestions and comments on this report will be appreciated.

Mitsugu Sumada
Chairperson, Conference Planning Committee
Provost, Hawaii Community College
University of Hawaii at Hilo

CONFERENCE RECOMMENDATIONS

I. *ORGANIZE A GROUP REPRESENTING GOVERNMENT AGENCIES, THE SCHOOLS, BUSINESS AND INDUSTRY AND COMMUNITY SEGMENTS TO LEAD, COORDINATE AND DEMONSTRATE AN EFFECTIVE READING PROGRAM FOR HAWAII COUNTY.*

II. *SET STANDARDS FOR READING PROFICIENCY AND HOLD RESPONSIBLE AGENCIES PUBLICLY ACCOUNTABLE AND PARTICIPATING PERSONS INDIVIDUALLY ACCOUNTABLE.*

III. *ESTABLISH A READING REFERRAL AND COORDINATION NETWORK IN HAWAII COUNTY WHERE THOSE WITH READING DEFICIENCIES WOULD BE IDENTIFIED AND HELPED TO ACHIEVE RECOMMENDED READING PERFORMANCE LEVELS.*

IV. *RECOMMEND AND OBTAIN PRE-SERVICE AND IN-SERVICE TEACHER TRAINING IN READING.*

V. *SECURE RESOURCES TO ACCOMPLISH THE PREVIOUS FOUR RECOMMENDATIONS.*

VI. *FOLLOW-UP ON CONFERENCE RECOMMENDATIONS AND SUMMARIZE CONFERENCE RESULTS IN A PUBLICATION.*

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Mr. Jack Hoag, Conference Moderator and
Regent, University of Hawaii Board of Regents

Welcome Address

I want to welcome all of you here today especially Dr. Fargo, Dr. Shigetomi and Dr. Ige and others who came from Honolulu to join us. I want to thank all of you who are taking the day out from your weekend activities to make this commitment for a very important national problem. I don't think it requires my time to substantiate the problem. I believe your conference packet has headlines that jump out at you. We constantly read and hear of the problem with reading within our community. I think the first real contact I had with this problem was at the very first board meeting I attended with the University of Hawaii Board of Regents when Harold Eichelberger, as the outgoing chairperson at that time, included in his outgoing address the reading problems in our schools and the difficulties that it makes for the students at the post-secondary level in reconciling this problem in their adjustment to college life. Just last week I read in the Chronicle for Higher Education how national S.A.T. scores were down dramatically and how reading problems have contributed to this. Today's speakers and panelists, I am sure, will stimulate our thinking and highlight these problems. Those of us who convened this conference for reading progress, have purposely brought together what we feel is a good cross-section of our community--from business, labor, government, the judiciary, as well as professional educators to attempt to focus on this problem. We hope that today through our interactions, through the brain-storming sessions that all of you will be involved in, we'll be able to reach new solutions or at least be able to zero in on the problems that we have and try to attain goals and objectives that will reach some satisfaction in the reading imbalances that we have in our society. So I do want to encourage each and every one of you to take an active role today. This will not be a teacher-student relationship where you are going to be given knowledge that is imparted to you. We want you to take part and our speakers will simply be here to stimulate you and lead our thinking. So without further introduction I would now like to bring on for a few brief remarks, Dr. Samson Shigetomi who is the Hawaii State Director for Vocational Education.

Dr. Samson S. Shigetomi, State Director for Vocational Education

Conference Sponsor's Remarks

Honorable Judge Kimura, distinguished guests, ladies and gentlemen, the State Board for Vocational Education is happy to sponsor this conference on "Reading for Progress." I guess the purpose of calling me up here is to recognize the sponsor and provide the sponsor an opportunity for a commercial... that is a light commercial. Generally the stereotype response when the term vocational education is mentioned is that one either thinks of a specific occupation or of a program that is for somebody else's children and not your own.

You may be interested to know that the State Board for Vocational Education which is the Board of Regents has used federal vocational education funds not only for programs and services but also to encourage vocational educators to conduct research, to experiment with new methods and techniques, to provide in-service teacher education and to test models which will deliver services more effectively and more efficiently. Some of the activities include assisting disadvantaged youngsters to overcome deficiencies in reading, English and mathematics. The result of one project showed that reading and writing skills can improve by more than two years after one semester of instruction. The State Board has also provided funds to campuses to develop program instruction, resource materials for counselors, and led the way in individualizing instruction and improving articulation among the community colleges, and between the community colleges and the secondary schools. There are numerous other developments where the impetus is coming from the State Board staff but time does not permit me to elaborate on them. Before I close, however, I'd like to tell you a story about the chicken and the pig walking past the church. There was a sign which read "Let's Help Feed The Needy." So the chicken said to the pig, "Let's donate something--we'll give them ham and eggs." And the pig replied, "For you that's easy, for me that's a total commitment!"

The point I'm trying to make is this: all of you should be congratulated for being so dedicated and for sacrificing your Saturday here for such a worthy cause. If we had to pay for the time spent and the expertise available in this room, it would certainly cost the government thousands of dollars. Here, we're getting a bargain--all of this for the price of a luncheon. So we're happy to sponsor this particular conference. May I take this opportunity on behalf of the State Board for Vocational Education to extend to you our best wishes for a successful conference. Thank you.

Introduction of Judge Shunichi Kimura by Jack Hoag

It's a real privilege and a pleasure to introduce our next speaker. I think he's had unique experiences working in many facets of our community to bring these perspectives to us. I think we all know former Mayor Shunichi Kimura in his role as chief administrator on this island for the last approximately ten years. He was also a former practicing attorney but is regarded more importantly as a chief executive of our county government and now judge of the Third Circuit Court. Judge Kimura has done so much for our island especially in commitment to the youth of our island. He has deep concerns . . . that he expressed to me: his deep frustrations because he knows that we have the resources and the people in the community to help solve these problems that come before him at the bar. I'm sure today Judge Kimura will help lead us in the direction to solve some of these problems that face us in the community today. I'm very happy to welcome Judge Shunichi Kimura.

Judge Shunichi Kimura, Third Circuit Court

Judiciary Department, State of Hawaii

Keynote Address
(Extemp)

Thank you very much. The agenda on your tables states that I'm the keynote speaker but that's really just a title. Actually what Jack Hoag has on his calendar is that I'm a filler. I'm a filler from the time of registration to the time of the 9:00 panel, so my speaking time on the podium has been reduced to several minutes. But I've been selected here not to give any solutions or ideas but simply to speak about the problems that I face in the area of reading and comprehension in the criminal justice system.

The title "Reading for Progress" is a bit too luxurious for me--it's a bit too comfortable--and it's a bit too high in its expectations. I'm more interested, for the courts and for many of our troubled people, of a much lesser level of expectation of "reading for survival" rather than "reading for progress." Let me cite you an example: several months ago I had a 20 year old adult come before me for burglary in the first degree for entering a home and swiping a considerable amount of personal properties and money. He was a dropout and he was a functional illiterate as far as reading, writing and understanding all the elemental guidelines for him to conform to the many rules and regulations that we have on the Island of Hawaii.

In sentencing the young adult; I was faced with the major responsibility of protecting the community for this is the function of the judiciary first and foremost in adult cases. We protect the community by several means such as punishing an individual so hopefully he would understand that he has committed a wrong and hopefully it would deter him and other people from committing similar wrongs. But the most important way to protect the community from the defendant and other troubled individuals is to redirect and rehabilitate the individual because that's the only sure way to protect all of our rights--personal rights and our property rights. So how do you help this defendant who is a functional illiterate to rehabilitate himself and how do you redirect him. How do we protect all of our homes and our property and be humane to his future also?

So in sentencing him, I required that he get individual tutoring in reading and writing and in learning how to add two plus two so that he could cash his paycheck or his welfare check and so he could learn to survive. The defendant was very upset about this because this was one area that he could not take. He could take incarceration. He could take jail. He could take many other kinds of punishment but the one area he could not emotionally handle was the requirement that he learn how to read and write and become a minimally functional literate individual in the community.

Why he had such an emotional blockage, I don't know. I think you educators could probably understand that better than I do. I had hoped to end this example and say that the requirement and sentencing turned out well, that he's working, that he's off welfare and there's not going to be any criminality in his future but the answer is quite opposite. I don't know if we've succeeded one iota in assisting him so that he would be a literate and functional individual in the community. We still have to provide a great deal of structure and support to this individual for many, many years and I don't know if we're ever going

to succeed in improving his reading and writing and comprehension and arithmetic skills so that he can survive in the jungle of conformity rather than in the jungle of criminal activity. This is the reality I face in the courts and the reality that many of us and many of you as educators face in the classroom. The reality of dependence, of juvenile delinquents, of dropouts and troubled individuals who require a different kind of a sentencing than what we are providing at the present time.

Dr. Kono, in one of the handouts given to you, cited the statistic that in New York City about three fourths of the juvenile delinquents are retarded at least by two grade levels or by two years. I think that's a fairly conservative estimate for the Island of Hawaii as Stanley Shikuma and the probation officers, who between them have hundreds of years of experience behind them, point out that at least 80 percent of our troubled young people that are probationers for the Third Circuit Court have severe reading and comprehension problems. They have severe reading problems. I have not said that they are dumb. So many of these individuals who are probationers, who are troubled young people, who are dropouts are above average in intelligence. Some of them must be near geniuses because they can manipulate the judge better than you could. I've been manipulated out of my shoes by many defendants and probationers who make "F's" in your classroom but score an "A" in terms of manipulation of the court system, manipulation of the school system, and the obvious manipulation of their families. And it takes a bright person to understand the tremendous arithmetic calculations that go into shooting crap. I could never follow those calculations and I've lost much money, way back, of course. I think all of us like Larry Capellas and John Beck and those of us who are faily good in shooting pool understand that the best pool shooters are probably the "F" students who have tremendous capacity for understanding geometry, and all the intricacies that go into all the bank-shots and all the geometric difficulties that surround pool.

Recently a defendant came to court who measured in the so-called dull range by the regular method of measuring these individuals. While the Court was in recess, he was advising his counsel of all the constitutional niceties and all of the latest constitutional laws and how to trap the Judge into making an error so that when he goes back to prison, his lawyer would have a basis of making a successful appeal to the Supreme Court. Is this individual really retarded? Is this individual really lacking the capacity to become a literate individual? He's a highly literate and highly functional individual within the criminal world and in the so-called deviant world. But in our measurements in the courtrooms and in our psychological testing in our schools, this individual for his total measurement time was classified as a near mentally retarded individual.

Many of us who deal with troubled youngsters know that the common stereotype that troubled individuals and deviant individuals of the criminal world are low achievers in terms of a low mental capacity is not correct. I spoke to the teacher at the Oahu Prison School and asked him if he could give me a stereotype of the young people who come to him for remedial training in terms of reading and comprehension and learning basic skills to survive.

I had hoped that the teacher would really berate me for this type of question; but he did not. He said that most of the people who attend school there

and most of the troubled individuals who go to Oahu Prison are low achievers in the way we traditionally measure them. They are individuals who come from poor backgrounds, with low motivation, with limited discipline, with ineffective family tribes and obviously a low level of reading, writing and comprehension. So we can recognize that there are common characteristics with many of our troubled young and many of our dependents that have come before the court and school system.

Now some of you may say that I talked enough about problems and all of you are tired of problems because the Becks, the Capellases, the Mizubas and all of you gathered here know the problem much, much more intimately than I and have been with it for a much longer period and I should speak of solutions. I must carry out my role as the instigator of discussion by presenting some ideas and some off-beat suggestions so that they will be discussed by the panel and by some of you later on. What would I suggest if we are to seek the level of a functionally literate individual for our troubled youngsters so that they conform to the myriad of rules and regulations that we've thrown at him. I would suggest several things. First of all, Dr. Kono and the materials here stress consistently the necessity for the interaction of the home, the school, and the community. I don't understand what that word community means because I can't define it in our context today. But I understand what a home is. I would begin with the responsibility and accountability of parents. If they are responsible for the driving habits and the drivers licenses of their children, why could they not be responsible for the reading, writing and the comprehension competence of their young as well? And, if we have parents who are consistently delinquent in that area of responsibility, is this not really child abuse? Is this not really a matter that we should look into in terms of possible foster home placement or guardianship with others? I grant you this is a very harsh suggestion. For many of the individuals who come to us with extreme problems, with ineffective parental or family tribes around them, I believe we should face the situation realistically, rather than treating the young person who comes before us in isolation and say, "Now, Johnny don't do it again--I"m going to place you on probation so you shape up in school." Then Johnny goes home to a situation that couldn't possibly contribute to that kind of rehabilitation. What do we do in the courts, in schools, and in other institutions that work with young people and troubled people? We do very little in terms of really forcing parents and the tribal units around these young people to really pay attention, to be interested, to do their best in helping these individuals.

It's time that we begin to find leverages again. A police officer related to one of our probation officers that his parents were required by the principal of the school to be responsible to send his youngster to school. He realized that his parents felt that leverage to be responsible and carried out their responsibility by sending him to school every day.

I'm not advocating the return to that kind of a leverage but certainly something much more than we have at the present time. Parents can, with almost total immunity be disinterested and be abusive to their children in terms of being teachers at home or requiring them to attend school or some alternative school. In the home, what if all of us, schools, courts and other institutions, were more aggressive in the requirements of parenting. This year we had a mix-up in terms of whether the schools were to have parent-teacher conferences. How

many of us in the schools felt a great deal of guilt when the mix-up occurred or did we allow a long period to pass before the mix-up was unraveled. I must confess that as a parent I was not particularly disturbed when they said you need not attend the parent-teacher conferences as it was voluntary. For our youngsters who need help, for our parents who need help, the lack of urgency displayed in reinstating the necessary parent-teacher conferences is not what is needed today.

Often in our Family Court juvenile proceedings, we find parents who are ineffective and we do little with them and for them. We have tried a unique approach. We've placed several of the parents on "probation" along with their children. If you were to ask me what is the legal basis by which this is done, I confess that I can't cite a legal basis. But I have an urgent basis. We've required that the parents together with their youngster must receive counseling with the Hilo Counseling Center to learn the minimal skills necessary such as, how to communicate, how to be effective parents, how to be firm and how to be loving at the same time and all of the essential knowledge that are required in the parent-child relationship, in this educational, social and loving unit that we call the family unit. I've been remiss in not placing on "probation", not only the youngster, the adult defendant, but also his wife, his children, his parents and the larger unit that surrounds this individual, because that's the reality of rehabilitation. The reality of helping individuals requires more than looking at the troubled individual and saying "you do it on your own" or else you're going to face consequences of incarceration or further probation.

In times of deep frustration, I have hoped that we could require that couples cannot get married until they are competent to be married, competent to be parents, competent to start family units. Obviously none of us advocate such requirements in terms of laws. I've spoken to Reverend John Beck and to some of the ministers at lunch the other day on this problem. I've asked that before they marry individuals, that they require premarital counseling not only in the area of sexual relationships, not only in the area of religious training, but also to discuss the nitty gritty of dollars and cents and how to plan for their financial future, to discuss the responsibility of having a child. I asked the ministers to discuss that the responsibility is not only to get one more bedroom and one more money earner in the family but the parents responsibility is to be an educator and create in your home a learning environment; that the responsibility as a parent is not only to go to the "Y" or the University Extension or go to mother's club and learn how to change diapers and how to put Johnson's powder on the backside of a young individual, but also to realize their large responsibility to create that kind of a home educational unit. But how many of us are willing to do that? How many of us as ministers, as marriage counselors are willing to say to couples that you've got to come to six sessions of counseling? How many of us as judges or other people who deal with family units are willing to do this? Not many of us are willing to do this but we've got to begin to take a much firmer position if we are to attack these very difficult vexing problems that face our troubled family units.

In reference to our schools, I, like most of you here, have unreal expectations of schools. I expect Bill Waters and Larry and Kiyoto and all of the educators to be constant miracle workers to turn out 100 percent functional literates and geniuses into our community. The truth is our schools simply aren't built that way, their curriculums are not built that way, they don't have the personnel people to accomplish all of our high expectations.

The schools ought to be encouraged, ought to be pushed to realize many alternative programs that they've been struggling to develop. I do sympathize with educators. They're constantly criticized but how many of us would go and lobby with the legislators so that Larry and Kiyoto and Bill Waters can obtain the passage of the Hukilike Program that they are seeking so ardently as the top priority in the current legislative session? How many of us even know the existence of the Hukilike Program and of the high priority that Bill, Larry and others have placed it for the Island of Hawaii? How many of us have even spoken to our legislators about the reading, writing and comprehension problem of our troubled youngsters?

The PIP (Pre-Industrial Preparation Program), the tremendously successful early-admission program at the Hawaii Community College, the early admittance program for many of our dropouts and troubled individuals, project RISE-the modest tutoring program--these are the programs that we should provide to our schools. We should urge and help educators to lobby with our legislators so that they can obtain the funding, the necessary programs, so that legislators can provide the alternatives for many of our youngsters who cannot survive within the normal structure of our public school system.

We must remember that in terms of funding from the legislature, we are not a wealthy state. We're a poor state. We don't have many resources in terms of tax generating industries. We've got to look at other areas for assistance. We should urge that our schools get the maximum amount possible for counselors, for specialists in reading, for the remedial teachers and for the programs that you have been asking each year and have not realized.

However, let us not stop with governmental funding. Let's look at another resource that exists in our community. Let's look at individuals who have a tremendous commitment and the desire to be the "pig" that Samson was talking about and to offer their whole life and their energies to our problems. I believe there's a great number of Jack Hoags that exist in our community, that there are many people like Val Wessel, the retired Joe Garcia and many other people who are willing to volunteer if they knew how to help and if they were called upon to help.

As I came into the room, I asked Jack Hoag for all of his junior bank executives to help our juveniles and defendants understand money management. Jack said, "We always say yes!" And so I have a commitment from the First Hawaiian Bank to help our young people. Of course, if he had said no, I was going to remind him that I had already spoken to Jim Evans at the Bank of Hawaii and he had said yes!

I believe we have this reservoir, this rich reservoir of individuals, and this is why I've asked Harry Kim through the Law Enforcement Assistance Agency and hopefully through the Juvenile Justice Act that President Ford signed last year, to provide a community coordinator and a center where we can recruit volunteers. We can get the Garcias, the Hoags, the Wessels and all of us together, so that we can lend our abilities whether it be tutoring or the big brothers or big sisters or work stations where our young can have a work-study type of a project. To Dante and Merle and the County officials here, to the State officials here, we could ask that they allocate some of those already

budgeted summer programs so that some of our troubled youngsters can have work stations on the county crews or the State crews. We could have a combination of work and tutorial programs so that we can attack the problems of reading and writing and comprehension.

There are many many other things that can be discussed but let me make a specific concrete proposal. Several individuals in the community have offered several thousand dollars to any school who would be willing to start a program to attack the problem of functional illiteracy. Let us raise more funds and give it to Ethel at Hilo Union School and contract with the teachers in this hotel who are working as clerks and waitresses. Get these unemployed teachers of reading, of English and hire them to be tutors who would work with the teacher in the language program. This is going to be a small effort but would be a first step for those of us who want to commit to help our schools by utilizing the talent of the many young people in this community who are trained teachers.

These are but some examples of the specific things that can be done. I'm encouraged by the faith that you have in our Island. We have problems but indeed we have resources and we can cure them.

Let me, for the year 2000, make several court "orders". That every parent shall be an effective educator who is competent in teaching the three R's and all of the other social skills ; that all the schools will have competent, committed and dedicated teachers, educational and law officers; that if the parents, educators and we do not obey this "order" that all of us incarcerate ourselves in the "jails" of our community. Thank you very much.

Introduction of Panelists: Jack Hoag, Conference Moderator

Thank you very much Judge Kimura for a very creative, very committed sense of direction on the problem we face today. Taking Judge Kimura's lead in reading for survival, I'd like to introduce our panel members who will take part in a brief symposium. We've brought together a cross-section of individuals who will give us their perspectives of today's problem: Our first speaker is Jude Tavares, who is a student at Hawaii Community College. I believe Jude will be able to give us the perspective of the student who has personally experienced reading problems. Next we'll hear from Randy Webb, Director of Administrative Services for Hawaiian Sugar Company Ltd.. Following Randy, we'll hear from Ed Silva, the Director of Personnel Services, County of Hawaii, then from Elaine Kono, who is a Curriculum specialist in the Hawaii District Office of the DOE. She will be followed by Pieper Toyama, who is a reading instructor for Hawaii Community College and we'll conclude with Stanley Shikuma who is a probation officer for the Third Circuit Court.

Panelist: Jude Tavares
Student, Hawaii Community College

I'd like to tell you of an experience that I had in high school. It was my senior year and I had this friend who wasn't a full-time student. I was doing average work in class and then decided to goof off for a little while. So me and my friend cut out and when we came back to class the teacher called me to the back and said I was not going to graduate. I said how come and he said I cut out too often. So, I dropped out of school and came to find out that my friend had graduated and he had cut out the same amount of days I did.

Then I found out the grading system is not constructed on the ability of the student but how well you played a game with the teacher. It was fun--but then I cruised for about three years and worked as a janitor in part-time jobs. It's hard to get a job when you've got no high school diploma. So I met this girl. She lives in my district. I applied at Hawaii Community College, checked it out myself and decided I wanted to be a carpenter. So to become a carpenter you've got to read. You've got to be able to read and write good if you don't want to be stuck with a janitor job all your life. I couldn't see myself doing that so I took courses to become a carpenter. A lot of courses--speech, English, art can come in handy. But to me the grading system should change, it should be not how you get along with the teachers but the ability of your work. You'll get some smart guys, some average and dumb guys. If the teacher grades the student on his abilities, then you know which ones are prepared and which ones are not prepared; which are better and which are not.

I never used to dig reading, I never did read one book until one day my friend and his bunch of friends came over my house and we was cracking each other up. We came up with these kind of big, hypothetical words that aren't usually established real good, yet they made me feel smart. So I decided I should try reading. I read my first book and it was interesting. It's a trip after a long time if you never did read a book and you try to read a good book. You can't read that fast, but you can't even know the meaning of the words. A person cannot make it in the world without wanting a high school diploma, and not know how to read. He maybe can read but he cannot understand real good. That's why I took English and reading to improve my reading so I can get a better job. I can't see myself stuck with a janitor job all my life.

Thank you.

Panelist: H. S. Randy Webb
Director, Administrative Services
Hawaiian Sugar Company, Ltd.

It is a pleasure to have the opportunity to discuss with you what effects the level of reading ability has on industry. I can assure you that the level of reading ability does have an effect on an employee's performance, as well as potential for promotion.

As I see it, in business and industry, there are really two problems involved with reading ability.

> First, there is the problem of reading ability, or rather, how the level of reading ability affects industry and;
>
> The second problem is that of the excessive amounts of reading required in the performance of the duties of a manager or supervisor.

I would like to address myself to the first part of the problem by asking, "Does the level of reading ability of our employees have any effect on business and industry?" In my opinion, the answer to this question is a definite yes.

In the past years, industry has been moving more and more into mechanization and automation of equipment, machinery and process operations. Just to operate, service or repair this highly sophisticated and complex machinery and equipment requires the use of operating, servicing, and repair manuals. These manuals are technical in nature and to be able to read and understand them requires a rather high degree of reading ability. Industry is now moving into the instrumentation and computer control of many operations and this move will require an even higher level of reading ability.

If an employee is to progress above the unskilled level, the ability to read and to exercise judgment from what he reads is a necessary qualification in industry today.

Maybe the next question should be, "Do we have a problem in our present workforce caused by the level of reading ability?"

Again, I think the answer has to be yes. I would like to use the sugar industry as an example of some reading ability problems. In the sugar industry, we have an apprenticeship and trades progression program for all trade jobs. Written into this program is a requirement that all trade applicants must be able to read and write. All of our jobs are classified as either unskilled, semi-skilled, or skilled. Our tradesmen are in the skilled classification.

When this program was negotiated some years ago, it was agreed to evaluate all tradesmen in the sugar industry to determine their grade placement in the program. Part of the evaluation involved some testing.

During our discussions with the Union, the Union took a position that some of these tradesmen were capable of performing the job duties of their trade, but were unable to do a paper and pencil type test. It was agreed that we would develop a practical measurement and trade knowledge test for each trade. This type of test would give the tradesman an opportunity to demonstrate his trade skills, even if there was a reading problem.

After the evaluations, each tradesman was placed in one of three categories--promotable immediately, promotable after further training, and non-promotable. This original screening of tradesmen took place in 1962, and today we have some journeymen that have difficulty in reading the manuals of their trade. Also, we still have a few tradesmen that are classified as non-promotable. They are non-promotable because of their level of reading ability.

The apprenticeship part of our program requires four years as an apprentice. During this training period, the apprentice is required to complete a certain number of correspondence courses.

An apprentice with limited reading ability will not be able to complete these courses and will wash himself out of the program.

It is not just the older employees that experience difficulty in reading--it is also with those who recently graduated from some of our local high schools.

We have discontinued using pre-employment testing for bargaining unit jobs, but when we were testing, our director of our personnel research department had stated he could predict with a fair degree of accuracy which high school the applicant attended just from his level of reading ability.

Our managers and supervisors have a different problem in reading for progress. Their problem is the large volume of reading required in the performance of their work.

My job is no different, if I read everything that comes over my desk, I am sure I would be well informed, but would make very little progress.

In order to improve this situation, we have installed a speed reading course for all management personnel. Some employees have completed the course and there is a marked improvement in their reading speed as well as reading comprehension.

I am convinced that there is a need to improve the level of reading ability to meet the needs of industry. It is my hope that the discussion groups today will be able to make some suggestions and recommendations that will lead to improving this reading situation.

Panelist: Edward L. Silva
Director, Personnel Services
County of Hawaii

In 1959 we purchased standardized examinations for Police Officers and Firefighters from the Public Personnel Association now known as the International Personnel Management Association. We purchased these examinations because we did not have the time, technical staff or funds to construct our own. In addition, these examinations were put together by experts and were tested examinations with national norms established.

Since we could never satisfy our police and fire needs through achievement examinations, which are examinations testing for actual job knowledge, we tested for individuals who had the basic aptitude or ability to learn after they were hired. After they are hired, police and fire recruits receive intensive on-the-job training and most of them continue on with Police and Fire Science courses.

In my personal judgment these examinations are fundamentally reading examinations. A candidate will read a paragraph then refer to multiple choice items indicating which item most accurately describes what the paragraph is about.

Another significant portion of the examination is on vocabulary, the use of words, or how words relate most accurately to another word or group of words. To answer correctly the candidate must have a correct concept of what idea the word conveys.

About two-thirds of the examination is on reading comprehension and vocabulary. The other one-third is on arithmetical reasoning and other items of common knowledge, but even to understand these items reading ability is a necessary tool.

Now I don't want to burden you with norms, centiles, the technical language of testing or too many figures but a mere spattering of this is necessary to give credence to my impressions.

Generally if we followed the established norms, bearing in mind that these norms were established by products of Mainland schools, only about 10 to 15% of the local applicants would pass these examinations.

This meant that for every 40 applicants, we could expect only about four or six to pass. According to the norms, about 33% should pass. For every 40 applicants at least 13 should be expected to pass, but as you can see, this was twice the number of local applicants actually passing.

The results were disappointing because we could never satisfy our Police and Firefighter needs on the basis of the established norms. To adhere by these norms would mean a continuous testing program, with much time and money, to satisfy our police and firefighter manpower needs.

Being that we did not have the time, or the money, we dropped our passing score 10 percentage points and this gave us the highest 20 or 30% of the local applicants taking the examination, which is what the test was supposed to do anyway. Apparently this decision was all right because once on the job the men did well in training, in their work, and many are enrolled in police and fire science courses and are succeeding there as well.

1965 Policeman Exam
(Silva cont'd.)

For comparative purposes let me take you through the highlights of two police examinations. In 1965 we gave an examination to 53 police applicants. Our arithmetic mean was 57. The arithmetic mean under the test norm was 75 (2634 tested). We were 18 points below the Mainland norm; 33.4% of the Mainland applicants were above average in scores. We did not have even one above average, and had to drop the passing score to 60% of the items to get our highest 20%. With this drop, 10 applicants passed but they were at the 40 and 50 percentile points on the norm.

For the second illustration, I selected a 1972 Policeman Exam which is the most recent Policeman Exam requiring high school education and got the following results.

Out of 35 applicants 12 were above average which matches with the test norm. Th arithmetic mean for the test was 73 (1222) and our test group had a 70. This was exceptional as far as local applicants are concerned so I decided to find out why?

Of the 35 applicants, I found that eight were products of non-County schools and mostly from Mainland high schools. The other 27 were from County of Hawaii schools.

I separated them into two groups and obtained findings supporting my suspicions. The group of eight made up of applicants which were non-County educated had an arithmetic mean of 95 whereas the remaining 27 made up of products from Hawaii County schools had an arithmetic mean of 63.

Eight out of eight from the eight member group scored above average and only four in the 27 member group were above average whereas it should have been about eight or nine by the established norm.

By dropping the passing score to 60%, eight from the eight group passed and eight from the 27 local group passed.

When we give examinations to building inspectors, supervisors, and others with sections of codes, laws, rules or regulations to interpret, the test results of these sections are generally not as good as for other sections of the examinations. The local applicants tell me they don't like the test sections involving reading comprehension and interpretation, and yet this is the essence or at least a very important part of their work.

In a recent article written by Dr. Charles B. Schultz, director of validity studies with the Washington State Department of Personnel, he contended that while we think we have a good achievement test, or aptitude test too for that matter, for all practical purposes it may be fundamentally a reading test. The person who reads well may get more correct answers and know less subject matter than one who knows more subject matter and cannot read as well.

Too often we assume that people, especially those with high school diplomas read equally as well.

Having some insight to this problem I can sympathize with the local applicant, at non-professional levels, who continually declare I can do the job but I can't pass the test.

With these impressions which are really surface impressions and not supported by in-depth scientific studies, I must conclude that I personally have a strong suspicion that our people, the products of the schools of the County of Hawaii, cannot read as they should, or as we expect them to read, and that they are not reading, comprehending, and interpreting ideas from written communication up to their capacity.

Dr. Elaine Kono, Curriculum Specialist, Language Arts
Hawaii District Office, Hawaii State Department of Education

(This address was accompanied by a visual presentation of outlines, charts and diagrams.)

I'm going to speak on two topics: one, I'll try to address my talk to the question of "Who is a poor reader?" and secondly, I'll speak to the question, "What are the schools doing about teaching reading?"

In the Conference book that you have, I quoted some statistical data from a nation-wide survey that claims that one out of four students has difficulty in reading. We usually talk about students who are having reading difficulty in terms of the number of grade levels a student is below what is expected of most students at his grade level. For instance, a twelfth grade student who registers at the tenth grade reading level may be said to be two grade levels below in reading. Another student in the fourth grade and reads on what is normally expected of a second grader is said to be two grade levels below in reading. However, there is a relative difference between these two students. It's serious enough to be two grade levels below in reading in the fourth grade; but because oftentimes the reading problems are compounded as the student goes on from one year to the next, by the time he is in the twelfth grade he may be not only two grade levels but many more levels below in reading.

Another method of rating students' reading performance that most of us are acquainted with, is that of reading percentile scores in a standardized reading test. Here's a percentile scale, showing the distribution from 1 percentile to 99.9 percentile. We see that the mid-point is 50 percentile. We can divide the scale into quarters, so that the first or lowest quartile would be up to 25 percentile. So Student A who scores 45 percentile in a reading test and be in the second quartile is hitting quite an average score.

"Percentile" is not quite the same as "percent," which literally means "of a hundred." The suffix "ile" in percentile refers to ability or liability or susceptibility as it is used in words such as "docile" and "fragile" and agile." Percentile then refers to where a student stands in relation to others in a representative group of a hundred. Thus, if a student scores 73%ile, it means that there are 73 people out of a hundred who are below him and there would be 27 people above him. When we are examining test scores in reading, we are especially concerned about those who are in the low quartile. These would probably be those twelfth graders who are more than four or five grade levels below in their reading.

I have talked only about achievement and then only in terms of test measurements. As educators we think in terms not only of achievement or performance, but in terms of achievement in relation to the students' ability. Examine the achievement scores of students "A", "B", "C", "D." Look now at

their ability scores in a comparable test. Student A shows 20%ile in performance but 57%ile in ability, while Student B registers the same 20%ile in performance but 10%ile in ability. We are very much concerned about Student C who scores 85%ile in ability and 37%ile in performance.

A word of caution is in order here. I have been talking in very simplistic terms, as if these scores are absolute so that we could pinpoint a student being at a specific score like 37%ile. This isn't so at all. I have taken the mid point of 37 when in fact there is a band of 30 to 45 that the student's performance in the test falls in. Another caution is that low test scores are an indication of some problem in reading. They are not necessarily conclusions that the students who score low are retarded.

Moreover, a test is just a test. It is a means of measuring that we might use. As educators we rely on many other ways of assessing a student's ability and achievement, such as the teacher's observation of a student's behavior in class, and an examination of a student's performance in other classes and outside of class. As reading teachers we are very careful about examining a student's ability and performance in the non-verbal or non-reading area as well. I'm raising many questions in your mind and that's my intention here. You may go over them in your study sessions later in the morning.

May I go on to the second part of my talk: What are the schools doing in reading? Certainly there are many activities; but let me focus on two points: (1) It's not exclusively remedial work that we want for students with reading problems; (2) Reading is a learning skill.

As educators we are conscious of the development of the whole child. It's not just a matter of correcting some error or skill deficiency; rather, we work to help the child develop to his highest potential. On surface it may sound highly idealistic, but this is the philosophy we go by.

Let me apply this to the examination of a student's achievement in terms of his ability that I referred to a while ago. Even with a child whose academic abilities may be rather limited we don't give up. We try to help him by using various methods, some of which may be rather unconventional.

In reading we do a great deal in the way of developmental reading with most of the students. Certainly some students need remedial work. But remedial work is not limited to those who may show low achievement. They also include those whose achievement is higher than that of most students but whose performance is not up to their even higher potential.

The other thing is that reading is not a content or a subject or a discipline in the same way that history is or biology or social studies. It doesn't have a subject matter of its own. Reading is a skill. It's a learning skill and whatever the child does, whatever the learner does, he's going to keep on learning. He's got to hold up that skill -- that tool which is reading. There are other skills, but reading seems to be an all important one.

There are efforts made to try to have everyone be concerned and to help the students with developing the reading skill. There is a project which takes priority over all of the projects in our Hawaii district schools. For the past few years, we've had a reading project going on in every school. It's a project so it's not just "we'll just grade the student's reading ability." It's a kind of measurable project with specific objectives and at the end of a certain time we will have done this. The climate is to have everyone take responsibility in seeing reading as a learning skill. The math teachers, the science teachers, the social studies teachers all are in this.

One of the ways in which we started was to work on the vocabulary subject area. We all know that each subject has its own vocabulary. The word may be the same in a number of subjects but then they may be different. I can think right away of an example of a word like rational. In modern math a rational number is very different from rational as it might be used in a philosophy or a history class. The word rationing as used in homemaking would be slightly different too. If a student can learn the word in each subject area that would be a great feat.

As educators we do talk about reading but at the same time we are very conscious of the development of language as not just reading per se but reading interwoven with the other areas of language development. As a teacher one cannot think only in terms of reading. What's the child's listening performance like? This is a very important part of reading. It's a receptive communication skill in the same way that reading is. One is by listening, the other one is by looking at print. Then there are productive communication skills -- writing and speaking orally. These are all interrelated.

I want to say that there are studies that have been conducted -- well-controlled studies that show relationship, for example, in trying to find the best way to teach writing for high school students. These studies show that the experimental group that did intensive reading did much better than two other groups. One was the control group doing traditional kind of writing -- go to class, learn about writing and do a lot of writing; the other experimental group was the group that did a lot of analyzing of written material and then going on to try to model that or do an extension work.

In the same way that I talked about reading as part of the total language development in the child, we see the learner, the child, the student in the milieu of various environments. School is only a small part of his environment. Most of the children spend only about six hours a day in school. The rest of the time when he's at home, he's at church, he's at the YMCA, he's at the ball park, he's down at the beach, he's surfing and so on. If we concentrate on reading only here, and no other activities in reading are done, you can expect the child would be pretty poverty-striken in the line of reading development.

As I've said in the hand-out, we do know that we need the help of the community and the help of the home. As Judge Kimura said, it should be the

responsibility of all of us to help our learners to become proficient in reading. I think that "Reading for Progress", our conference today, is trying to do that. We educators don't have all the answers. We'd like to have help from you people who are non-educators to come up with your suggestions, your ideas on how we can help our students, our learners, to read better.

Thank you.

Panelist: Pieper Toyama
Reading Instructor
Hawaii Community College

Please refer to your Hawaii Community College report in your packets: the figures are not to be taken as absolutes because measuring devices are imprecise. Rather the figures are to be taken as indications of the state of affairs at Hawaii Community College.

From my experiences I would say Hilo College also faces the problem of providing a college education to a number of students with reading problems. The data indicate our students are not reading as well as they should. This is not to say they cannot successfully pass through their chosen programs of study at the community college. We have good instructors who are giving students a good foundation in the basic skills and knowledge which make them qualified for work in their chosen fields.

If we are turning out qualified, well-trained students, in spite of the fact they are not reading as well as they should, then what is the problem? Why should we care if they have reading problems? Is there a problem?

Based on personal teaching experiences and discussions with students, I believe there is a problem. And it can eventually affect all of us.

The first aspect of the problem surfaces in the classroom. While it is true that our students are receiving the basic knowledge and skills which qualify them for work in their chosen fields, the fact that many find it difficult to comprehend their textbooks requires instructors to spend valuable time going over portions of the text word-by-word. If students could read their text independently, more time could be spent covering information and skills which may not be absolutely necessary but good to know. If instructors did not have to go over portions of the texts word-by-word they could be imparting additional information which would make our graduates more knowledgeable in their fields and in turn make them better mechanics, technicians, accountants, secretaries etc.

The second aspect of the problem surfaces once the student gets on the job. You all know how quickly new concepts and information enter almost every occupational field. Our students are qualified today, but if they have reading problems will they be able to keep up with expanding knowledge in their fields and remain qualified tomorrow? Will they be able to read and understand manuals, magazines, and articles which explain new techniques? As long as they have reading problems we may have a number of graduates who will find it very difficult to render excellent service to the community in the future.

If we want our graduates to remain successful in their chosen occupations, we must improve their reading in school and on the job.

Panelist: Stanley Shikuma
Probation Officer
Third Circuit Court

I am a Probation Supervisor with Family & Probation Services. Probation Officers are attached to the Family Court and Criminal Division of the Third Circuit Court. Our staff provides two main services to the Courts: 1) Investigations; 2) Supervision of cases.

Adult probation activities form a three pronged program in the courts: the staff processes investigations of defendants requesting release on own recognizance; conducts pre-sentence investigations of convicted offenders; and carries the post-sentencing caseload referred to earlier (probation supervision cases).

Family Court activities are: 1) Adjudication of juveniles; 2) Processing pre-disposition investigations; and 3) Providing casework services for those placed under supervision of the courts.

Under probation supervision and counseling of both adult and juveniles--the staff supervises the activities of those persons placed on probation so as to assure that their behavior conforms to the standards set down by the court; (sometimes referred to as surveillance) and they provide such guidance, counseling and assistance as may be required to aid in their rehabilitation.

In providing casework services, the Probation Officers are constantly seeking resources or alternatives to assist the client in making a satisfactory adjustment while he or she is known to the courts.

As part of their qualification, Probation Officers are required to have a working knowledge of all the resources in the community. These include private and public agencies, the services they provide and programs that are currently in operation. Probation Officers also support and assist in implementing new programs so that these services can be used to assist their clients.

One problem that arises in making referrals to programs and resources is: our clients who are unable to read sufficiently to qualify/or make applications for the services. For example: 1) We refer our boys and girls to the armed services and for some this kind of structure and environment that the Army/Navy provide is what they need. The kids are interested in enlisting but they can't pass the test; Some barely make it. Then they are unable to qualify for career or vocational training that the armed forces offer. In the days of the "draft"--we encouraged the boys to volunteer for induction because they couldn't pass the test for enlistment through the recruiting stations. Some adults don't like to apply for jobs because they can't fill out application forms.

Another referral channel is the Job Corps. This has been one of the better resources, especially now that the Multi-Purpose Center (of the County of Hawaii) has been screening the applicants. They have bent backwards to help our boys and girls. Of all the referrals they have processed for us, everyone of them were reading below their grade level. They have to be 16 years of age to join. All of them were classified after diagnosis to be reading below 6th grade--some as far down as 4th grade level. This does not mean they are rejected. They are given special training--some are sent to Hawaii Community College, others to the Honolulu Koko Head Center for help.

We are currently working with approximately 50 dropout youngsters on probation. Figure varies from time to time. Some of them have voluntarily left school, others suspended or expelled. I do not know if there is reasonable proof or of any empirical data that shows that not able to read contributes directly to delinquency. However, we do work with many boys and girls who have poor school records, both behaviorally and academically. I have been told that recently the school careers of seven local students were studied and the findings were these:

1) All seven were on the bottom of their 8th grade class.

2) All seven had history of misconduct in school.

3) All seven had severe reading handicaps.

4) All seven failed to graduate--dropped before graduation.

The Probation Officers are interested and concerned in helping our clients in all areas of his adjustment--home, school, employment and community. About a year ago, two of my Officers felt that their "charges" were doing poorly in school because of their reading handicaps and tried to help them. They came up with a volunteer project with the aid of three teachers. No specific goals were set. It was an attempt to help the boys with their reading. Classes were held at the courtroom--at night --and on a one to one basis. The program was discontinued after two months because the Probation Officer found: 1) It was very difficult to motivate the boys to attend sessions; 2) The setting (courtroom) may have been a contributing cause; 3) It seemed to be bad timing--being held at night; 4) The Probation Officer was not qualified to teach and 5) There were not enough materials. However,it wasn't a complete failure. The Probation Officers were able to improve their relationship with the boys and better rapport was established.

Thus, we in the "helping profession" and these include social workers, teachers, counselors depend a lot on resources and alternatives in working with our respective clients. One Judge has referred to us and our work as "conduits"--we channel our clients to the most appropriate resources and programs. Through casework techniques we try to motivate them to accept the services offered.

SUMMARY OF GROUP DISCUSSIONS

(This is a "merged" summary of the Reading for Progress Conference Recommendations. Six discussion groups deliberated over the problem of reading in Hawaii County and came up with the following thoughtful and perhaps provoking ideas for future action.)

RECOMMENDATION: I	*ORGANIZE A GROUP REPRESENTING GOVERNMENT AGENCIES, THE SCHOOLS, BUSINESS AND INDUSTRY AND COMMUNITY SEGMENTS TO LEAD, COORDINATE AND DEMONSTRATE AN EFFECTIVE READING PROGRAM FOR HAWAII COUNTY.*

- A task force of the University of Hawaii at Hilo, Hawaii Community College, DOE, Headstart, Hilo Counseling Center and Public Health agency be set up. All agencies that wish to be involved and are concerned with the reading problem should formally organize to put together a pilot project. (Apapanes)

- Seek cooperation of home, school and community to motivate students and produce better readers. (I'iwis)

- We should form a committee chaired by Judge Kimura to develop a program whereby trained personnel in the community would be used to supplement reading programs in the schools. (Elepaios)

- There must be a concerted and united effort by many people at the home, school and community level to get to the core of the reading problem. (Nenes)

- Involve parents, business-industry through in-service training and government leaders in an effort to make each person in Hawaii County literate. (O'os)

RECOMMENDATION: II	*SET STANDARDS FOR READING PROFICIENCY AND HOLD RESPONSIBLE AGENCIES PUBLICLY ACCOUNTABLE AND PARTICIPATING PERSONS INDIVIDUALLY ACCOUNTABLE.*

- The DOE should revamp its minimum testing evaluation programs and administer these tests to students at the beginning of Grade 1. (Apapanes)

II

- Existing agencies charged with the responsibility of teaching reading should publicly state standards to which they will be held accountable. An example of such a standard is: 90 percent of our high school graduates will be able to literally comprehend articles they themselves select from the local English language newspapers. (Elepaios)

- If any agency cannot adhere to the stated standard, they shall be required to explain and specify the materials, facilities, conditions and personnel they will need to meet those standards. (Elepaios)

- Parents must also be held accountable and must be made to realize that they are also responsible for the child's education. Board of Education policy should require parent teacher conferences; teachers should be given time for such conferences and employers should allow employees to attend such conferences. (Elepaios)

- Students should also be held accountable in being responsible for their own education. It is recommended that students be drawn into the process of motivating their fellow students--perhaps as a program which will train and pay students to become peer counselors and tutors to influence and teach their fellow students. (Elepaios)

- Set minimum reading performance levels for graduation requirements to prevent automatic student progression. One big factor in motivation may be automatic progression of students if schools do not challenge the students. Many times students feel that they can make it through school no matter what happens. (I'iwis)

- Provide realistic achievement standards at selected grade levels. We felt some students going through the school system don't have realistic expectations and once you lose them, it's going to be more difficult to help them come back and achieve what is set up in terms of reading standards. (I'iwis)

- We should look at the entry level diagnostic reading tests which should be given to all college students and require every student deficient in reading to take reading improvement classes. To do this we need testing for individual diagnostic levels and better means of identifying the reading levels of our students annually from K through college. (Mamos)

- We hope some kind of diagnostic things can be done at a very early age because it was pointed out that reading problems can be identified as early as preschool, kindergarten, 1st and 2nd grade. (Nenes)

- We think that a community audit ought to be made of the reading situation in Hawaii County and that this begin with the elementary grades in our public schools. (O'os)

- We should set performance standards for reading for each grade level. (O'os)

RECOMMENDATION: III	*ESTABLISH A READING REFERRAL AND COORDINATION NETWORK IN HAWAII COUNTY WHERE THOSE WITH READING DEFICIENCIES WOULD BE IDENTIFIED AND HELPED TO ACHIEVE RECOMMENDED READING PERFORMANCE LEVELS.*

- Identify persons who are not reading up to standard and refer them to agencies with personnel trained in the teaching of reading. (Apapanes)
- Hilo College should expand the current DES program to cover the follow-up of students who have been served as well as expand its coverage to more students. (Apapanes)
- Referral services from the Third Circuit Court and other social service agencies to adult education agencies should be expanded. (Apapanes)
- Employers should refer employees to in-service training programs available in the community in the area of reading in order to upgrade their work-related skills. (Apapanes)
- Have reading specialists set up a committee of volunteers to go out to assist and/or retrain teachers in reading instructional skills. (Elepaios)
- Provide free summer school with imaginative techniques in reading to help those individuals that have reading deficiencies. (I'iwis)
- We feel that when you teach reading, you cannot just say these are the reading specialists and reading teachers but what we need to do is have the overall school staff aware of reading and working as a team together. (I'iwis)
- We strongly feel that we should set up adult education classes to encourage reading and reacquaint parents to the joys of reading. (Mamos)
- Start to identify these individuals (those with reading problems) at a very early age. (Nenes)
- We should work at the preventive aspect of reading problems through adult and continuing education, in-depth pre-marital counseling early childhood education, nursery school and P.T.A. groups, counseling and family-therapy sessions. (Nenes)

RECOMMENDATION: IV	*RECOMMEND AND OBTAIN PRE-SERVICE AND IN-SERVICE TEACHER TRAINING IN READING.*

- Increase in-service teacher training in reading by 25 percent (of total number of teachers per school) per year and by 100 percent for those in pre-service teacher training by a) requesting the U.H. College of Education to give instruction in reading skills to teachers and to set up a proficiency standard in the teaching of reading for all in-service teachers and b) require a number and types of courses in reading for all teacher trainees in the U.H. College of Education to include diagnostic, prescriptive and evaluative reading and a practicum in reading. (Apapanes)

- A program should be set up to assist and provide in-service training to teachers on better ways to teach reading in the public schools. (Elepaios)

- We should emphasize in-service training of teachers since they are key individuals in teaching the students how to read. (I'iwis)

- We need training of instructors in the teaching of reading. (Mamos)

- Recommendation to DOE: We should require that all in-service teachers receive training in problems of reading difficulties and all pre-service teachers receive training in the teaching of reading. (Mamos)

RECOMMENDATION: V	*SECURE RESOURCES TO ACCOMPLISH THE PREVIOUS FOUR RECOMMENDATIONS.*

- Request resources from the (State) legislature and from private, federal and county funding to accomplish the pilot program. (Apapanes)

- Judge Kimura referred to some "seed money" in his Keynote address so something immediate can be done to utilize community resource people. (Elepaios)

- Use available community resources especially materials and personnel to help in this reading problem situation including more counselors, implementing the Career Development Continuum, media usage, and community support for appropriations for implementing the (conference's) recommendations. (I'iwis)

- Provide for a professional staff to carry out a community-wide campaign to achieve the following: illustrate the scope of the problem to the public; identify resources and link individuals to these resources; involve other individuals in the community to assist in areas where they are able and develop programs that are identified as "needed". (Nenes)

- We should marshal all the resources that we can possibly get and carry out a survey and assessment of needs. Support services should be given to the schools and the agencies working on this problem. (O'os)

RECOMMENDATION: VI	*FOLLOW-UP ON CONFERENCE RECOMMENDATIONS AND SUMMARIZE CONFERENCE RESULTS IN A PUBLICATION.*

- Send a report of this conference to all the participating individuals and agencies, Big Island legislators and other affected agencies so that we can have something tangible coming out of this conference. Have the planning group meet to summarize the recommendations of the six discussion groups, synthesize them and send it out with the Conference recommendations so that something will come out of this Conference. (Apapanes)

- We are concerned about our reading problems and these are just the beginning of our recommendations. We urge that we all submit our concerns and have them published. (Mamos)

(See Appendix, page A3-6 for further reference to persons listed on this page.)

APAPANES

Leader: Sybil Kyi

Resource Person: Audrey Furukawa

Reporter: Mitsugu Sumada

ELEPAIOS

Leader: Jean Pezzoli

Resourse Person and Reporter: Pieper Toyama

I'IWIS

Leader: Harry Chuck

Resource Person: Dixie Harrington

Reporter: Ken Iwanaka

NENES

Leader and Reporter: Harry Kim

Resource Person: Ellen Watanabe

MAMOS

Leader: Nobuko Fukuda

Resource Person: Hitoshi Ikeda

Reporter: Merle Lai

O'OS

Leader: Ethel Yoshimasu

Resource Person: James Mimaki

Reporter: John Beck

CONFERENCE CONCLUSION: JACK HOAG, CONFERENCE MODERATOR

It would be highly presumptous of me to try to recap the entire proceedings. I think the important objective of any conference, borrowing on a quote that Sophie Aoki (Life of the Land) made at a recent housing conference--"you know we really ought to cut out the big 'shibai' and instead of holding this meeting (at the Kona Hilton), we ought to be over at Ota Housing camp in Waianae finding out how to solve housing problems instead of here at a conference where we are just getting fat." This was not a conference where the participant got fat. This was not a conference where we spent a lot of money; we spent a concentrated time period in meaningful effort and hopefully it will eventually take the form of action. That's the important output.

We're going to have to publish and codify the conference results, hopefully with the help of the State Vocational Education Office. We'll give purpose to this if we can get out in the community and follow-up on some of the specific recommendations that have emerged from this conference. Many of the subjects that we discussed today were certainly not new knowledge but were very relevant to our community needs. So the charge is upon all of us, especially the organizers of this conference, to continue on from here.

You will all receive copies of the synopsis of this conference. More importantly we're going to expect that many of you--we have members here from the county council and the mayor is represented here today--who will carry these recommendations forward throughout the year to the DOE, to the University of Hawaii, to the community, to the kumi ai's, and to the legislature.

In closing I'd like to thank Dr. Fargo and all the people who came over from Honolulu as well as some of the people like Kats Tomita who traveled from Kona. I want to especially thank Bob Okuda who was--running around here all day--our media specialist with the visual aids. I would like to also thank Mits Sumada who was the guiding force planning this conference, and also Larry Capellas, Jim Carpentier, Harry Chuck, Nobuko Fukuda, Roy Kagawa, Harry Kim, Elaine Kono, Sybil Kyi, Sadao Nishida, Stanley Shikuma, Ed Silva, Barry Taniguchi, Pieper Toyama, Ethel Yoshimasu and Barbara Luckner. So thank you very much for your help. We'll be contacting you as soon as we focus on the next phase of our reading for progress goals.

Appendix

A CONFERENCE ON READING FOR PROGRESS
Saturday, March 8, 1975, 8:30 a.m. to 3:30 p.m.
Waiakea Resort Village, Hilo, Hawaii

A G E N D A

8:00 a.m.	*Registration*	C. Brewer Conference Room
8:30 a.m.	*Welcome*	Mr. Jack Hoag, U. H. Regent and Conference Moderator
	Introductions Conference Sponsor . .	Office of the State Director for Vocational Education Dr. Samson Shigetomi, State Director
8:40 a.m.	*Keynote Address*	Judge Shunichi Kimura Third Circuit Court
	Reading For Survival	
9:00 a.m.	*Symposium*	Mr. Jack Hoag, Moderator

Panel Members:
Jude Tavares, Student Representative, Hawaii Community College
Randy Webb, Director, Administrative Services
Hawaiian Sugar Company, Ltd.
Ed. Silva, Director, Personnel Services, County of Hawaii
Elaine Kono, Curriculum Specialist, Hawaii District Office, DOE
Pieper Toyama, Reading Instructor, Hawaii Community College
Stanley Shikuma, Probation Officer, Third Circuit Court

9:40 a.m.	BREAK	
10:00 a.m. to 12:50 p.m.	*Small Group Discussions* . .	Mrs. Sybil Kyi, Coordinator for Research and Development

Groups	Leaders	Resource Persons	Locations
Apapanes	Andrew Levin	Audrey Furukawa	C. Brewer Conf. Rm.
Elepaios	Jean Pezzoli	Pieper Toyama	C. Brewer Conf. Rm.
Iiwis	Harry Chuck	Dixie Harrington	C. Brewer Conf. Rm.
Mamos	Nobuko Fukuda	Hitoshi Ikeda	Ninole Room
Nenes	Harry Kim	Ellen Watanabe	Apapane Lounge
Oos	Ethel Yoshimasu	James Mimaki	Apapane Lounge

12:50 p.m.	LUNCH	Kupuna Room
1:30 p.m.	*Luncheon Address*	Dr. George Fargo, Professor Special Education University of Hawaii
	It's A Possibility	
2:15 p.m.	*Group Reports*	Group Representatives
3:15 p.m.	*Conference Summary*	Mr. Jack Hoag
3:30 p.m.	*Adjournment*	

This conference was sponsored by the Office of the State Director for Vocational Education through the Education Professions Development Act, Part F, Section 553.

A CONFERENCE ON READING FOR PROGRESS
Saturday, March 8, 1975 8:30 a.m. to 3:30 p.m.
Waiakea Resort Village, Hilo, Hawaii

Discussion Groups

APAPANES

C. Brewer Conference Room

Andrew Levin: Leader
Audrey Furukawa: Resource
Edna Aguil
Laurence Capellas
Jim Carpentier
Kenneth Fujiyama
Walsh Hanley
Philip Ige
Robert Okuda
Kam Ming Pang
Elizabeth Reimer
Stanley Shikuma
Edward Silva
Mitsugu Sumada
Edward Toriano
Thomas Yanagisawa

ELEPAIOS

C. Brewer Conference Room

Jean Pezzoli: Leader
Pieper Toyama: Resource
Haruko Chang
Lynne Enoki
Roberto Figueroa
Al Goto
Lloyd Hara
David Ikeda
Merle Lai
Sister Jacinta Martin
Patricia Okamura
Monte Richards
Yukio Shiigi
Takeo Tajiri
Ronald Taniguchi
Jude Tavares
Margaret Ushijima

IIWIS

C. Brewer Conference Room

Harry Chuck: Leader
Dixie Harrington: Resource
Otto Aurstad
Norman Bezona
Anthony Costa
Jack Hoag
John Keppler
Yaeko Kunishige
Susumu Maeda
Sakiko Miyao
Kenneth Muranaka
Sam Shigetomi
Yoshiaki Shimizu
Valentine Wessel
Josephine Yadao
Tom Yamane

MAMOS

Ninole Room

Nobuko Fukuda: Leader
Hitoshi Ikeda: Resource
Douglas Beatty
John Beck
Barbara Ducosin
Ikuo Hisaoka
Jane Iida
Hideo Ikeda
Charles Isaacks
Raymond Iyo
Kenneth Kameoka
Edward Lingo
Herbert Matayoshi
Kirk Smith
Barry Taniguchi
William Wong
Fujie Yamamoto

NENES

Apapane Lounge

Harry Kim: Leader
Ellen Watanabe: Resource
Marsha Balada
William Carse
Gerald DeMello
Tomio Fujii
Joseph Garcia, Jr.
Terry Kaide
Elaine Kono
Evelyn Margolis
Dorothy Matsui
James McBrien
Ruth Moore
Thomas O'Brien
Ann Sadayasu
Joseph Sherrard
Kats Tomita

OOS

Apapane Lounge

Ethel Yoshimasu: Leader
James Mimaki: Resource
Dante Carpenter
George Fargo
Edwin Fujita
Roy Kagawa
Shirley Imada
Tsukasa Inoue
Milton Leslie
Paul Miwa
Tetsuya Murayama
Harold Nishimura
Jitsuo Niwao
June Roggenburg
Randy Webb
Joanne Yamada

A CONFERENCE ON READING FOR PROGRESS
Saturday, March 8, 1975, 8:30 a.m. to 3:30 p.m.
Waiakea Resort Village, Hilo, Hawaii

Participants

1. Aguil, Edna
   Teacher
   Ka'u High and Pahala Elem.

2. Aurstad, Otto
   Instructor in Food Service
   Hawaii Community College

3. Balada, Marsha
   Instructor in Business Education
   Hawaii Community College

4. Beatty, Douglas
   Project Manager
   RSM Inc.

5. Beck, John
   Outreach Counselor
   Hawaii District, D.O.E.

6. Capellas, Laurence
   Curriculum Specialist
   Hawaii District, D.O.E.

7. Carpenter, Dante
   Councilman
   County of Hawaii

8. Carpentier, Jim
   Clinical Psychologist
   Hilo Counseling Center

9. Carse, William
   Assoc. Professor of Education
   University of Hawaii at Hilo

10. Chang, Haruko
    Vocational Rehabilitation Service
    State of Hawaii

11. Ching, Gordon
    Instructor in Business Education
    Hawaii Community College

12. Chuck, Harry
    Retired District Superintendent
    Hawaii District, D.O.E.

13. Costa, Anthony
    Div. Chairman, Trades and Industry
    Hawaii Community College

14. Enoki, Lynne
    Instructor on Oral Communication
    Hawaii Community College

15. Fargo, George
    Professor, Special Education
    University of Hawaii, Manoa

16. Fujii, Tomio
    Councilman
    County of Hawaii

17. Fukuda, Nobuko
    Assoc, Professor of Education
    University of Hawaii at Hilo

18. Furukawa, Audrey
    Reading Specialist
    University of Hawaii at Hilo

19. Fukamizu, Raymond
    Assistant Specialist in Student Services
    University of Hawaii at Hilo

20. Garcia, Joseph Jr.
    Community Relations
    Hilo Coast Processing Co.

21. Goto, Al
    Dean of Instruction
    Hawaii Community College

22. Hara, Lloyd
    Chairman
    School Advisory Council

23. Herrington, Dixie
    Reading Specialist
    Ka'u High and Pahala Elementary

24. Hoag, Jack
    U. H. Regent
    Vice-President, First Hawaiian Bank

25. Ige, Janet

26. Ige, Philip
Assistant Superintendent
Instructional Services, D.O.E.

27. Ikeda, David
Instructor in Agriculture
Hawaii Community College

28. Ikeda, Hideo
Business Management Officer
Hawaii Community College

29. Ikeda, Hitoshi
Assoc. Professor of Education
University of Hawaii at Hilo

30. Imada, Shirley
Instructor in Business Education
Hawaii Community College

31. Inoue, Tsukasa
Hilo Contractors Association

32. Isaak, Charles
Member
Hawaii Island Chamber of Commerce

33. Iwanaka, Kenneth
Instructor in Cooperative Education
Hawaii Community College

34. Iyo, Raymond
Instructor in Machine Shop
Hawaii Community College

35. Kagawa, Roy
Employment Service
State of Hawaii

36. Kaide, Terry
Chief Clerk,3rd Circuit Court
State of Hawaii

37. Kameoka, Kenneth
Instructor in Electricity
Hawaii Community College

38. Keppeler, John
Managing Director
County of Hawaii

39. Kim, Harry
Director, LEAA
County of Hawaii

40. Kimura, Shunichi
Judge, 3rd Circuit Court
State of Hawaii

41. Kono, Elaine
Curriculum Specialist
Hawaii District, D.O.E.

42. Kunishige, Yaeko
Teacher
Hilo High School

43. Kyi, Sybil
Coord. for Research & Development
Office of State Director - Voc. Ed.

44. Lai, Merle
Councilwoman
County of Hawaii

45. Lingo, Edward
Instructor in Police Science
Hawaii Community College

46. Maeda, Susumu
Kulani Honor Camp

47. Martin, Sister Jacinta
Principal
St. Joseph High School

48. Matayoshi, Herbert
Mayor
County of Hawaii

49. Matsui, Dorothy
Instructor in Business Education
Hawaii Community College

50. McBrien, James
Instructor in Diesel Mechanics
Hawaii Community College

51. Mimaki, James
Reading Specialist
University of Hawaii at Hilo

52. Miwa, Paul
Chancellor
University of Hawaii at Hilo

53. Moore, Ruth
Instructor in Assoc. Degree Nursing
Hawaii Community College

54. Muranaka, Kenneth
Instructor in Welding & Sheet Metal
Hawaii Community College

55. Murayama, Tetsuya
Instructor in Automotive Mechanics
Hawaii Community College

56. Nishimura, Harold
Instructor in Carpentry
Hawaii Community College

57. Niwao, Jitsuo
President
Japanese Chamber of Comm. & Industry

58. Okamura, Patricia
Librarian
Hawaii Community College

59. Okuda, Robert
Media Coordinator
Hawaii Community College

60. Pang, Kam Ming
Instructor in Electricity
Hawaii Community College

61. Pezzoli, Jean
Psychometrist
Leeward Community College

62. Reimer, Elizabeth
Counselor & Instr. - Handicapped
Hawaii Community College

63. Sadayasu, Ann
Teacher
Kapiolani School

64. Sherrard, Joseph
Instructor in Food Service
Hawaii Community College

65. Shiigi, Yukio
President
Hilo Contractors Association

66. Shigetomi, Sam
State Director
Vocational Education

67. Shikada, Ichiro
Vice-Principal
Konawaena High & Intermediate School

68. Shikuma, Stanley
Probation Officer
3rd Circuit Court

69. Shimizu, Yoshiaki
Instructor in Drafting
Hawaii Community College

70. Silva, Edward
Director of Personnel Services
County of Hawaii

71. Sumada, Mitsugu
Provost
Hawaii Community College

72. Tajiri, Takeo
Instructor in Automotive Mechanics
Hawaii Community College

73. Taniguchi, Barry
Member
School Advisory Council

74. Taniguchi, Ronald
Instr. in Auto Body Repair/Painting
Hawaii Community College

75. Tavares, Jude
Student
Hawaii Community College

76. Tomita, Kats
Department of Social Services
County of Hawaii

77. Toriano, Edward
Instructor in Diesel Mechanics
Hawaii Community College

78. Toyama, Pieper
Instr. in Reading Fundamentals
Hawaii Community College

79. Watanabe, Ellen
Reading Clinic Teacher
Hawaii District, D.O.E.

80. Webb, Randy
Director, Adminis. Services
Hawaiian Sugar Co., Ltd.

81. Wessel, Valentine
Local III
Operating Engineers

82. Wong, William
Business Manager
Hilo Medical Group

83. Yamada, Joanne
LEAA
County of Hawaii

84. Yamamoto, Fujie
Department of Health
State of Hawaii

85. Yamane, Tom
Instr. in Cooperative Education
Hawaii Community College

86. Yanagisawa, Thomas
Dept. of Personnel Services
County of Hawaii

87. Yoshimasu, Ethel
Principal
Hilo Union School

88. You, Ayako
Instructor in Business Education
Hawaii Community College

A CONFERENCE ON READING FOR PROGRESS
Saturday, March 8, 1975, 8:30 a.m. to 3:30 p.m.
Waiakea Resort Village, Hilo, Hawaii

Office of the State Director for Vocational Education
Under The Provisions Of
The Education Professions Development Act, Part F, Section 553

Evaluation Summary

Fifty-five of the eighty-eight participants who attended the conference returned completed evaluation forms.

Their responses to the questions on the evaluation form were as follows:

PURPOSE: To bring together community representatives to examine the reading problem in the County of Hawaii and to formulate proposals for resolving the problem.

1. Please indicate your evaluation of the overall achievement of the stated purpose:

a.	excellent	16
b.	good	31
c.	average	3
d.	fair	1
e.	poor	1

3 participants did not respond to this question.

2. Please indicate your evaluation of the following as they contributed to the achievement of the stated purpose:

a. Keynote Address: Reading for Survival

excellent	38
good	13
average	0
fair	0
poor	0

4 participants did not respond.

b. Symposium

excellent	11
good	32
average	8
fair	1
poor	0

3 participants did not respond.

c. Group Discussions

excellent	21
good	29
average	5
fair	0
poor	0

d. Group Reports

excellent	14
good	30
average	7
fair	0
poor	0

4 participants did not respond.

e. Luncheon Address: <u>It's A Possibility</u>

excellent	22
good	27
average	4
fair	0
poor	0

2 participants did not respond.

f. Reading Materials

excellent	6
good	26
average	10
fair	1
poor	0

12 participants did not respond.

3. How far do you feel the conference was successful in:

a. Examining the problem, conditions and causes:

very successful	20
successful	24
somewhat successful	11
not at all successful	0

b. Determining feasible goals and objectives in dealing with the problem:

very successful	14
successful	29
somewhat successful	11
not at all successful	1

c. Suggesting possible program approaches to achieve the goals and objectives:

very successful	10
successful	34
somewhat successful	9
not at all successful	1

1 participant did not respond.

d. Helping you in your professional capacity or individual role to contribute to the solution of the reading problem in your school/community:

very successful	10
successful	20
somewhat successful	19
not at all successful	4

2 participants did not respond.

4. Do you have any suggestions for specific areas of improvement in the conference approach?

There should have been more lay participation in the planning of the conference.

The reading materials should have been sent out in advance to allow the participants to come prepared to the conference (5 respondents).

The whole program should have been explained in advance.

It was never made clear what the assignment was for the participants.

There should have been more representatives from the DOE and Hilo College.

A larger number of participants from the elementary level would have been able to concentrate more on preventative than remedial measures.

The time was too short particularly for the symposium and the group discussions. There was not enough time to ask questions of the panel members or to concentrate on specific problems in the group discussions.

To avoid repetition in the group reports, one person should have summarized all of them.

The guidelines for the group leaders hampered the discussions.

The guidelines were acceptable, but difficult to adhere to.

More structure was needed in the group discussions to avoid mere recounting of personal experiences.

The time in the group discussions should have been spent in solving identifiable problems.

A specific follow-up structure should have been presented to the participants.

The Apapane Lounge was not suitable for the group discussions as there was too much noise from the lobby area.

The panel members should have been seated at a higher level than the audience for better communication.

Several participants indicated that they had no recommendations for areas of improvement; the conference was well-planned and worthwhile.

Of those who made additional comments on the evaluation form, the majority stated or implied that a follow-up to this conference was necessary. Several expressed concern that the interest awakened by this conference should not be dissipated through lack of vigorous action.

Suggested follow-up action included:

publishing and disseminating a report of the conference.

holding a follow-up conference.

institutionalizing the conference membership.

examining in depth the areas on which all the participants agreed.

implementing the recommendations and proposals coming out of the conference.

Recommendations to assist the implementation included:

articulation of the academic strain in the DOE, Hawaii Community College and Hilo College.

concentration of testing, evaluation and reevaluation of the child's readability in the primary and upper elementary levels.

involvement of parents.

more counselors in the elementary grades.

ACCESSION NUMBER: VT102311

PUBLICATION DATE: MAR75

TITLE: CAREER EDUCATION NATIONAL FORUM (MARCH 19-21, 1975).

DESCRIPTOR: *CAREER EDUCATION; CONFERENCES; PROGRAMS; EDUCATIONAL PLANNING; EDUCATIONAL DEVELOPMENT

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 34P.; RELATED DOCUMENTS VT 102 311 THROUGH VT 102 313 IN THIS ISSUE.

ABSTRACT: THE CAREER EDUCATION NATIONAL FORUM, THE FIRST NATIONAL CONFERENCE OF CAREER EDUCATORS, WAS HELD AT THE CENTER FOR VOCATIONAL EDUCATION, COLUMBUS, OHIO ON MARCH 19-21, 1975. INTERACTION OF EDUCATORS AT ALL LEVELS FOCUSED ON ISSUES OF PHILOSOPHY, IMPLEMENTATION, LEGISLATION, AND DEVELOPMENT OF CAREER EDUCATION PROGRAMS. THIS BOOKLET CONTAINS THE FORUM PROGRAM AND PRESENTERS AND AN ALPHABETICAL LISTING OF ALL FORUM PARTICIPANTS. PARTICIPANTS INCLUDED REPRESENTATIVES FROM 38 STATES, THE DISTRICT OF COLUMBIA, AND GUAM. WITH THE BOOKLET IS A MEMORANDUM GIVING INFORMATION ON THE FORUM TOPICS AND OTHER PUBLICATIONS. (MF)

INSTITUTION NAME: OHIO STATE UNIV., COLUMBUS. CENTER FOR VOCATIONAL EDUCATION.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

VT 102 311

Career Education
National Forum

VT 102 311

CAREER EDUCATION NATIONAL FORUM

March 19–21, 1975

The Center for Vocational Education
The Ohio State University

Dear Forum participant:

The Center for Vocational Education and the Career Education National Forum staff would like to take this opportunity to express appreciation for your involvement and support of this first national conference of career educators. The success of such a forum depends as much on the active participation and enthusiasm of those persons in the audience, as on those persons invited to present papers. The interaction of educators at all levels, focusing on the vital issues of philosophy, implementation, legislation, and development of career education programs is absolutely essential to the continued quality of the students' learning experience. We hope that the time you spent at the Forum was rewarding, and that your level of support for and involvement in career education remains high.

Sincerely,

Arthur F. Terry

Arthur F. Terry

Barbara M. Bednarz

Barbara M. Bednarz

CAREER EDUCATION NATIONAL FORUM

Wednesday, March 19

REGISTRATION

DINNER

KEYNOTE SPEAKER – Kenneth Hoyt – Associate Commissioner of Career Education

Thursday, March 20

PRIORITIES IN CAREER EDUCATION: FEDERAL, STATE AND LOCAL

Jerry Elbers (representing Kenneth Hoyt),
Lois-ellin Datta (representing Corinne Rieder),
Margaret Ferqueron, Alonzo Crim
Chairperson, Robert Taylor

PLANNING & IMPLEMENTATION OF CAREER EDUCATION: STATE LEVEL

Gene Bottoms, Linda Keilholtz
Chairperson, Lance Hodes

PLANNING & IMPLEMENTATION OF CAREER EDUCATION: LOCAL LEVEL

Robert Sampieri, H. Dale Holden, Judy Harland, Gary Jarmer
Chairperson, David Goodwin

UTILIZATION OF RESEARCH & EVALUATION DATA

Henry M. Brickell, Lois-ellin Datta, Jerry Walker

ANALYSIS OF CAREER EDUCATION LEGISLATION

William Weisgerber, Gilbert Browning, Charles Radcliffe
Chairperson, David Jesser

PRIVATE SECTOR ROLES IN CAREER EDUCATION

Lewis Easterling, John Sessions
Chairperson, Robert Wise

LOW COST IMPLEMENTATION STRATEGIES: DISTRICT LEVEL

James Dunn
Chairperson, Michael Hock

MODELS OF CAREER EDUCATION PROGRAMS: CURRICULUM, WORK EXPERIENCE, GUIDANCE & COUNSELING, AND PLACEMENT

David Hampson, JoAnn Harris-Bowlsbey, Grant Venn, Decker Walker

EXPERIENCE-BASED CAREER EDUCATION (EBCE)

Lou Maguire, Mervin Kimmins, Jerry Spann, Barbara Bockol, Robert Williams, Marian Reid, Ronald Riley

CAREER EDUCATION "HOOSIER" STYLE

James Meuninck, Paul L. Smith, Jr.

SCHOOL-BASED PLACEMENT SERVICES HERE AND NOW

William Mitchell

A COMPREHENSIVE APPROACH TO CAREER EDUCATION: MOUNTAIN/PLAINS

Thomas R. Flores, Michael C. Fenenbock

REVISION, FIELD TEST, AND DISSEMINATION OF 61 CCEM CURRICULUM UNITS (AIR)

James Dunn

COMMUNITY-BASED WORK EXPERIENCE: JUNIOR ACHIEVEMENT

Gene Matheny, Bruce Beery

CAREER DECISION-MAKING PROCESS

Dave Winefordner and Staff

METROPOLITAN CAREER CENTER

Jack Gibbs

NEW DIRECTIONS: JUNIOR HIGH

Renee Fredrickson, Phyllis Kragseth

LIFE CAREER PATTERNS OF WOMEN

Video Tape Showing

Friday, March 21, 1975

OCCUPATIONAL EXPLORATION PROGRAM

Norman Singer, Robert Blum, James Altschuld

CAREER EDUCATION IN IOWA—A CURRICULUM PROCESS

Alan A. Kahler

BREAD AND BUTTERFLIES

Robert Fox

HOW TO SELECT AND EVALUATE CAREER EDUCATION INSTRUCTIONAL MATERIALS

Sam Bittman, Fredrick Kraver

COUNSELOR'S LEARNING KIT

Ilana Rhodes

COOPERATIVE ADULT EDUCATION PROGRAMS

A. B. Moore, James C. Granger

CONTEMPORARY EXPLORING IN THE BOY SCOUTS OF AMERICA: LIFE STYLE DEVELOPMENT

Randolph Scott

PRODUCTIVE HIGH SCHOOL

George Richmond

EVALUATING CURRICULUM IMPACT

Jerry Walker

PRODUCTS FROM THE SCHOOL-BASED CAREER EDUCATION DEVELOPMENT AT CVE (CCEM)

Ralph J. Kester, Nancy Martinez

CAREER EDUCATION IN THE FLINT COMMUNITY SCHOOLS

David J. Doherty, Ann Southwell, Doug Weir, Dennis Waddell

NEW DIRECTIONS: SENIOR HIGH

Renee Fredrickson, Phyllis Kragseth

MALE PERSPECTIVES ON WOMEN'S CHANGING ROLES

Renee Fredrickson, Phyllis Kragseth

DISSEMINATION INFORMATION SYSTEMS

Jake Huber

CAREER PLANNING SUPPORT SYSTEM

Harry N. Drier, Robert Campbell, Louise Vetter, Evans Curry

A FUTURE PERSPECTIVE

Congressman Albert Quie

PARTICIPANT'S LIST

Abernathy, Lewis M.
Director
National Center-World of Work
N.T. Box 5397
Denton, Texas 76203
817-788-2263

Aiken, William
University of Tennessee
110 Henson Hall
Knoxville Tennessee 37919
615-974-4443

Alden, John
Department of Health, Education
and Welfare
400 Maryland Avenue SW
Washington, D.C. 20202
202-245-7982

Allen, William
Career Education Director
Los Angeles Community College District
2140 W. Olympic Blvd. Room 234A
Los Angeles, California 90006

Antholz, Mary Bee
Appalachia Educational Laboratory
P.O. Box 1348
Charleston, West Virginia 25325
304-344-8371

Arceneaux, Robert
Supervisor, Career Education
Lafayette Parish School Board
P.O. Box 2158
Lafayette, Louisiana 70501
318-232-3849

Ashmore, Cathy
Synthesizer for Forum
5657 Sandlewood Blvd.
Columbus, Ohio 43229
614-422-4277

Aslanian, Carol
Associate Project Director
Policy Studies in Education
52 Vanderbuilt Avenue
New York, New York 10017
212-684-6940

Ator, Dallas
Associate Director, Special Projects
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Ball, Robert R.
Coordinator, Career Placement Center
Des Moines Public Schools
1800 Grand Avenue
Des Moines, Iowa 50309
515-284-7755

Balthaser, R. D.
Assistant Director
State Department of Education
Vocational Education Division
65 South Front Street
Room 904
Columbus, Ohio 43215
614-466-2095

Barber, Anita
Coordinator, Career Education
Alabama Department of Education
Vocational Division
815 State Office Building
Montgomery, Alabama 36104
205-832-3557

Barlow, Melvin
Professor
Graduate School of Education
UCLA
Los Angeles, California 90024
213-825-1838

Barnes, William J.
State Supervisor of Career Education
State Board for Community College
and Occupational Education
Room 207 State Services Building
1525 Sherman Street
Denver, Colorado 80203
303-892-3011

Baughman, C. Dale
Director
MCJUS
6800 Holte Road
Clayton, Ohio 45315
513-837-7781

Beckel, Kenneth E.
Editor of Career Education Materials
South-Western Publishing Company
5101 Madison Road
Cincinnati, Ohio 45227
513-271-8811

Bednarz, Barbara
Forum Program Co-Director
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Bellin, Allan
Director, Career Development Program
2301 Fenwick
Cleveland Heights-University Heights
City Schools
University Heights, Ohio 44118
216-382-9200

Benziger, Ralph
Career Coordinator
74 West William Street
Delaware, Ohio 43015

Bichler, Mary Jo
Gateway Technical Institute
1001 South Main Street
Racine, Wisconsin 53403
414-637-9881

Bina, James
Synthesizer for Forum
1991 North 4th Street
Columbus, Ohio 43201
614-291-6291

Bittman, Sam
Coordinator, EPIE Career Ed. Project
EPIE Institute
463 West Street
New York, New York 10014
212-675-1163

Blackmore, G. May
Director of Career Education
Bethlehem Central
700 Delaware Avenue
Delmar, New York 12054
518-439-4921

Blue, Marion
Project Director
Ashland Company—W. Homes J.V.S.
Route 2, Box 75
Ashland, Ohio 44805
419-289-3313

Blum, Robert E.
Career Education Coordinator
Jefferson County Public Schools
1209 Quail Street
Lakewood, Colorado 80215
303-237-6971

Bockel, Barbara
Research for Better Schools, Inc.
17th & Market
Suite 1700
Philadelphia, Pennsylvania 19103
215-561-4100

Boldrey, Tom F.
Comprehensive Illinois Occupational Education
Demonstration Center
210 East Jefferson Street
Joliet, Illinois 60432
815-727-4681

Bottoms, Gene
Director
Division of Program and Staff Development
Department of Education
Office of Instructional Services
Room 231 State Office Building
Atlanta, Georgia 30334
404-656-2556

Bowdich, Art
Career Development Coordinator
Career Development
7410 Market Street
Youngstown, Ohio 44512
216-758-0487

Brame, John H.
U.S. Navy Recruiting Command
4015 Wilson Blvd.
Arlington, Virginia 22203
202-692-4889

Bray, Marlyn
Director, Career Education Project
Cincinnati City Schools
230 East Ninth Street
Cincinnati, Ohio 45202
513-369-4806

Brickell, Henry M.
Director
Policy Studies in Education
52 Vanderbuilt Avenue
New York, New York 10017
212-684-6941

Bridges, Ernestine
Director, Career Education
Rapides Parish School Board
P. O. Box 1230
Alexandria, Louisiana 71301
318-442-1301

Briley, Kathie
Information Officer
Appalachia Educational Lab.
P. O. Box 1348
Charleston, West Virginia 25325
304-344-8371

Brookmole, Rocky
Career Education Coordinator
Region XV Education Service Center
Box 5199
San Angelo, Texas 76901
915-655-3045

Brown, Arthur, Professor
Wayne State University
College of Education
Room 399
Detroit, Michigan 48202

Brown, Roy A.
Assistant Superintendent
Washington School District
78 West Maiden
Washington, Pennsylvania 15301
412-222-7920

Brown, Thomas W.
Director of Career Education
Montgomery County Career Education Coop.
215 North Park
Independence, Kansas 67301
316-331-3090

Browning, Gilbert
Program Development Specialist
Louisiana State Department of Education
P.O. Box 44064, Capitol Station
Baton Rouge, Louisiana 70804

Bushnell, David
Director for Program Development
HumRRO
300 North Washington
Alexandria, Virginia 22314
703-549-3611

Cameron, Walter A.
Assistant Director
University of Tennessee
2020 Terrace Avenue
Knoxville, Tennessee 37919
615-974-4466

Campbell, Robert
Research Specialist
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Carter, Roosevelt
Columbus Area Chamber of Commerce
50 West Broad Street
Columbus, Ohio 43215
614-221-1321

Cicek, Louis S., Jr.
Program Director
Office of Career Education
301 East 293rd Street
Willowick, Ohio 44094
216-944-8561

Clifton, Ronald
Counselor Educator
Frostburg State College
Frostburg, Maryland 21532
301-684-4362

Cliser, Martin K.
Synthesizer for Forum
4491 Kimmel Road
Columbus, Ohio 43224
614-262-7512

Coatney, Richard
Assistant Director
Operation Guidance
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Conard, Vicki Jo
Business Relations Director
Junior Achievement of Central Ohio
Box 2491
Columbus, Ohio 43216
614-291-3127

Cooper, Adaline B.
Field Coordinator
Regional Education Service Agency, Region V
1210 13th Street
Parkersburg, West Virginia 26101
304-485-6513

Corman, Robert A.
Instructional Consultant
Cincinnati Board of Education
230 East Ninth Street
Cincinnati, Ohio 45224
513-369-4913

Cornell, Jim
Synthesizer for Forum
5697 Forest Elm Lane
Columbus, Ohio 43229
614-846-7474

Cory, Elizabeth
Career Education Coordinator
Rutherford B. Hayes High School
Euclid Avenue
Delaware, Ohio 43015

Cox, Walter H.
Director, Career Guidance Center
Indiana University
715 East 7th Street
Bloomington, Indiana 47401
812-337-9328

Crawford, Harold R.
Professor
Iowa State University
Department of Agricultural Education
223 Curtiss Hall
Ames, Iowa 50010
515-294-5872

Crim, Alonzo A.
Superintendent
Atlanta Public Schools
224 Central Avenue, SW
Atlanta, Georgia 30303
404-659-3381

Cripe, Julie
Curriculum Consultant
Indiana Department of Public Instruction
120 West Market Street
Indianapolis, Indiana 46204
317-633-4507

Crummel, Robert A.
U.S. Office of Education
Region IX
50 Fulton Street
San Francisco, California 94102
415-556-4920

Crump, Carol B.
Research Assistant
National Institute of Education
1200 19th Street NW
Washington, D.C. 20202
202-254-5648

Cubit-Swoyer, Donna
Elementary Career Awareness Consultant
Central Jersey I-E Counselor
71 Main Street
Woodbridge, New Jersey 07095
201-636-0348

Curry, Evans
Research Specialist
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Dale, Ron
Vice President
McKnight Publishing Company
P.O.Box 2854
Bloomington, Illinois 61701

Dr. Dale
Placement Follow-up Specialist
Manatee Junior College
P.O. Box 1849
Bradenton, Florida 33506

Datcher, Ellen F.
Assistant Director
Career Development Exemplary Project
Browne Junior High
26th & Benning Road, NE
Washington, D.C. 20002
202-396-5831

Datta, Lois-ellin
Deputy Assistant Director
Career Education Program
National Institute of Education
1200 19th Street, NW
Washington, D.C. 20208
202-254-5310

Davis, Herbert
Occupational Guidance Coordinator
Richmond Community Schools
Richmond Senior High School
Richmond, Indiana 47374
317-966-1741

David, Clayton C.
The Youcan Company
652-X Olde Towne Avenue
Columbus, Ohio 43214
614-451-8619

DeCarlo, Julia E., Chairperson
Department of Instruction, Graduate Ed.
Long Island University
C.W. Post Center
Greenvale, New York 11548
516-299-2245

Doe, Suzanne
National Technical Institute for Deaf
One Lomb Memorial Drive
Rochester, New York 14623

Doerr, Warren F.
Director
South-Western City Schools
465 Kingston Avenue
Grove City, Ohio 43123
614-875-2318

Doherty, David B.
Career Education Specialist
Bristol Career Education
Wolcott Road
Bristol, Connecticut 06010

Doherty, David J.
Flint Community Schools
923 E. Kearsley Street
Flint, Michigan 48502
313-238-1631

Donaghy, Patrick
Vice President
Charles E. Merrill Publishing Co.
1300 Alum Creek Drive
Columbus, Ohio 43213
614-258-8441

Dougherty, Don
Career Education Coordinator
Eastern Navajo Agency
P.O. Box 328
Crownpoint, New Mexico 87313
505-786-5317

Douglass, Rebecca
Educational Products Information Exchange
Institute of New York (EPIE)
463 West Street
New York City, New York 10014

Drenth, Ken
Eastern Upper Peninsula Intermediate
School District
Box No. 278
Rudyard, Michigan 49780
906-478-4401

Drier, Harry N.
Research Specialist
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Droney, Helen
Coordinator
30 Kirk Street
Lowell, Massachusetts 01852
617-455-5431

Dunn, James
Director
Developmental Systems Program
American Institutes for Research
P.O. Box 1113
Palo Alto, California 94302
415-493-3550

Dushkin, David A.
President
Learning Management, Inc.
Sluice Dock
Guilford, Connecticut 06437
203-453-4351

Easterling, Lewis
Manager, Economic and Research Analysis
Michigan State Chamber of Commerce
501 S. Capitol Avenue
Suite 500
Lansing, Michigan 48933
517-371-2100

Eichelman, Geraldine
Career Education Coordinator
Springfield City Schools
49 E. College Avenue
Springfield, Ohio 45505
513-324-4109

Eidell, Terry
Laboratory Director
Appalachia Educational Laboratory
P.O. Box 1348
Charleston, West Virginia 25325
304-344-8371

Elam, Mary Anna
Director, Career Education
3920 Fairfield Pike
Springfield, Ohio 45502

Elbers, Gerald
United States Office of Education
7th and D Streets, SW
Washington, D.C. 20202
202-245-2336

Elsman, Max
Manpower & Voc-Ed Weekly
2430 Pennsylvania Avenue NW
Suite G-12
Washington, D.C. 20037
202-659-5641

English, Thomas
Career Education Coordinator
Capitol Region Education Council
CCSC 1615 Stanley
New Britain, Connecticut 06053
203-225-7481

Ettinger, Jay
Career Education Consultant
St. Paul Schools
360 Colborne Avenue
St. Paul, Minnestoa 55102
612-298-5678

Evans, Rupert
Professor
University of Illinois
284 Education Building
Urbana, Illinois 61801
217-333-4382

Fadale, LaVerna M.
Research Associate
Cornell Institute for Occupational Education
13 Stone Hall
Cornell University
Ithaca, New York 14850
607-256-6514

Faulkner, Kate A.
Curriculum Specialist (Middle Grade)
P. O. Box 499
Union County Courthouse
Monroe, North Carolina 28110
704-289-4523

Feck, Vincent
Associate Professor
Western Kentucky University
Bowling Green, Kentucky 42101
502-745-3441

Fenenbock, Michael C.
Editor, Mountain-Plains Press
Mountain-Plains Education & Economic
Development Program, Inc.
Box 3078, Glasgow A.F.B.
Montana 59231
406-524-6460

Ferqueron, Margaret
Coordinator of Career Education
Department of Education
Divison of VTAE
Room 217 Knott Building
Tallahassee, Florida 32304
904-488-3995

Ferrin, Richard I.
Program Planning Officer
College Entrance Examination Board
888 Seventh Avenue
New York, New York 10019
212-582-6210

Flores, Thomas R.
Deputy Director
Mountain-Plains Education &
Econimic Development Program, Inc.
Box 3078, Glasgow A.F.B.
Montana 59231
406-524-6223

Ford, Jack D.
Assistant Director
State Department of Education
65 South Front Street
Columbus, Ohio 43215
614-466-5718

Foreman, Steve
Career Guidance Counselor
East High School
2800 East Pershing
Cheyenne, Wyoming 82001
307-635-2481

Forsythe, Lynda A.
Career Education Coordinator
Freedom Hill Elementary
1945 Lord Fairfax Road
Vienna, Virginia 22180
703-893-8070

Fox, Robert
Associate Executive Director
Agency for Instructional TV
Box A
Bloomington, Indiana 47401
812-339-2203

Fredrickson, Renee
2124 Como Avenue
St. Paul, Minnesota 55108
612-373-5544

Garland, Terry
Synthesizer for Forum
825 Conestoga Drive
Columbus, Ohio 43213
614-864-4437

Gaynes, Jill
Project Director
Society for Visual Education
1345 Diversey Parkway
Chicago, Illinois 60614
312-525-1500

Geik, Gerald E.
Title III Project Director
Coloma Community Schools
P.O. Box 218
Coloma, Michigan 49038
616-468-6785

Gilbert, Patrick
Vocational Director
Muskegon ISD
630 Harvey
Muskegon, Michigan 49442
616-777-2637

Glassman, Albert I.
Executive Director, Career Education
School District of Philadelphia
Division of Career Education
John F. Kennedy Center
734 Schuylkill Avenue
Philadelphia, Pennsylvania 19146
215-985-0710 Ext. 246

Goodwin, David
Research Associate
National Institute of Education
1200 19th Street NW
Washington, D.C. 20208

Graham, Denis D.
Assistant Director
Office of Accountability
Department of Education
400 West King Street
Carson City, Nevada 89701
702-885-5700 Ext. 214

Granger, James C.
Program Assistant
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Grimes, Paul
Principal
Muscogee School District
Columbus Junior High School
1112 29th Street
Columbus, Georgia 31904
404-323-4351

Guard, Harrell
Colorado Board of Education
Box 11
Boulder, Colorado 80302
303-447-1010

Guilfoy, Vivian
Project Director
Education Development Center
55 Chapel Street
Newton, Massachusetts 02160
617-969-7100

Halsey, David
Administrative Assistant
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Hamer, Thomas
Counselor
The Ohio State University
Arts & Sciences, III
Denney Hall
Columbus, Ohio 43210
614-422-6961

Hampson, David H.
Branch Chief, Career Education Program
National Institute of Education
1200 19th Street, N.W.
Washington, D.C. 20208
202-254-6057

Hardgrove, Sue
Graduate Assistant
Kent State University
Kent, Ohio 44240
216-672-2514

Harlan, Judy
Associate Director of Career Education
Richland City School District No. 2
6831 Brookfield Road
Columbia, South Carolina 29206
803-788-6240

Harmon, Maw
Specialist, Career Education
State Department of Education
942 Lancaster Drive, NE
Salem, Oregon 97310
503-378-3597

Harris, Charles M.
Asssociate Professor of Counselor Education
Madison College
Department of Psychology
Harrisonburg, Virginia 22801
703-433-6288

Harris, Everett W.
Assistant Professor
Marshall University
Occupational Adult & Safety Education
Huntington, West Virginia 25703
304-696-2380

Harris-Bowlsbey, JoAnn
Director
Project DISCOVER
Western Maryland College
Westminster, Maryland 21157
301-848-1113

Hawley, Paul R.
Career/Vocational Coordinator
Experimental Schools Program
Groveton, New Hampshire 03582
603-636-2241

Held, Kenneth
Director
Career Education Research Center
2101 Trinity Road
Duluth, Minnesota 55811
218-727-0918

Hock, Mike
Branch Chief, Career Education Program
National Institute of Education
1200 19th Street NW
Washington, D.C. 20208
202-254-6057

Hodes, Lance
Branch Chief, Career Education Program
National Institute of Education
1200 19th Street, NW
Washington, D.C. 20208

Holden, H. Dale
Director, Career Education
Richland City School District No. 2
6831 Brookfield Road
Columbia, South Carolina 29206
803-788-6240

Hormann, Marilyn S.
Vocational & Career Counselor
3398 East 55th Street
Cleveland, Ohio 44127

Hoyt, Kenneth
Associate Commissioner for Career Education
United States Office of Education
7th and D Streets, SW
R.O.B. 3, Room 3100
Washington, D.C. 20202
202-245-2284

Hoyt, Marcia
Director, Career Counseling & Placement
The Ohio State University
05 Brown 190 W 17th Avenue
Columbus, Ohio 43210
614-422-6734

Huber, Jake
Senior Research Consultant
Research & Educational Planning
University of Nevada
Reno, Nevada 89507
702-784-4921

Hugueley, James
Director, Career Education Programs
Memphis City Schools
1212 Vollintine
Memphis, Tennessee 38107
901-274-1351

Hull, Dan
Regional Coordinator Title VI
Northern Illinois University
Gurler Road
DeKalb, Illinois 60115
815-758-0636

Hunt, Myrtle E.
Director, Career Education
3230 9th Avenue South
St. Petersburg, Florida 33712
813-895-3671

Imobersteg, Kathy
Career Development
Coordinator
7410 Market Street
Youngstown, Ohio 44512
216-758-0487

Isaacs, Suzanne T.
Vice President, Product Development
Society for Visual Education
1345 W. Diversey Parkway
Chicago, Illinois 60614
312-525-1500

Jackson, Frank M.
Career Education Coordinator
Regional Facility for the Deaf
7910 S.E. Market Street
Portland, Oregon 97215
503-777-1445

Jackson, Mary A.
National Institute of Education
1200 29th Street NW
Washington, D.C. 20208
202-254-5407

Jacobsen, David
VTI Project Director
30 East Broad Street
Columbus, Ohio 43215
614-466-3485

Jarmer, Gary
Program Designer
Northwest Kansas Educational Cooperative
135 W. 6th Street
Colby, Kansas 67701
913-462-6781

Jensen, Lynn
Coordinator of Career Education
Office of the Utah State Board of Education
1200 University Club Building
Salt Lake City, Utah 84102
801-328-5574

Jesser, David
Director, Career Education Project
Council of Chief State School Office
1201 Sixteenth Street NW
Washington, D.C. 20036
202-833-7850

Johnson, Carole M.
Director
SDE Dissemination/Diffustion Project
for Career Education
Mississippi State Department of Education
P.O. Box 771
Jackson, Mississippi 39205
601-354-6819

Johnson, Rick
American Institute for Research
P.O. Box 1113
Palo Alto, California 94302
415-493-3550

Joslin, Leeman
Professor
University of Alabama
P.O. Box 2367
University, Alabama 35486
205-348-7575

Kahler, Alan A.
Project Director
Iowa State University
223 Curtiss Hall
Ames, Iowa 50010
515-294-5872

Kasper, Rick
Synthesizer for Forum
5525 Cantara Place
Apt. No. 4
Columbus, Ohio 43227
614-861-7911

Katz, Elaine
Editor
Career Education News
McGraw Hill Publishers
230 West Monroe Street
Chicago, Illinois 60606
312-368-6632

Keefer, Charles E.
Field Coordinator
Regional Education Service Agency
Region V
1210-13th Street
Parkersburg, West Virginia 26101
304-485-6513

Keilholtz, Linda
College Entrance Examination Board
888 7th Avenue
New York, New York 10019
212-582-6210

Kennedy, Larry
Career Motivation Coordinator
Mansfield City Schools
West 6th Street
Mansfield, Ohio 44905
419-522-0611

Kenoyer, Charles
Appalachia Educational Laboratory
P.O. Box 1348
Charleston, West Virginia 25325
304-344-8371

Kester, Ralph J.
Project Director
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Kievit, Mary Bach
Professor
Rutgers University
New Brunswick, New Jersey 08900
201-932-7938

Kiser, Dale
Career Education Specialist
Fayette County Schools
400 Lafayette Parkway
Lexington, Kentucky 40503
606-278-6076

Koestner, Joyce
Staff Development
100 West 23rd Street
Baltimore, Maryland 21218
301-396-7091

Koning, Hendrik
Director, H.S. Academics
C/O Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania 19101
215-841-5568

Kragseth, Phyllis
139 B Burton Hall
University of Minnesota
Minneapolis, Minnesota 55455
612-373-5544

Kraver, Fredric J.
Assistant Project Coordinator
EPIE Institute
463 West Street
New York, New York 10014
212-675-1163

LaLonde, Mike
Career Education Specialist
State Board for Vocational Education
State Office Building
900 E. Blvd.
Bismarck, North Dakota 58505
701-224-2710

Lane, Robert
Director of Vocational Education
and Career Development
653 Valley Drive
Benton Harbor, Michigan 49022
616-927-2371

Larson, Carl H.
Administrative Assistant
Curriculum & Instruction
Iowa Central Community College
330 Avenue M
Fort Dodge, Iowa 50501
515-576-3103

Latham, Gail F.
Elementary Curriculum Specialist
P. O. Box 499
Union County Courthouse
Monroe, North Carolina 28110
704-289-4523

Lawrence, Jim
Area Manager
Scott Education Division
6935 Oakwood Road
Parma Heights, Ohio 44130
216-886-5748

Lembo, John
Guidance Counselor
Brighton High School
Winton Road S.
Rochester, New York 14618
716-442-1500

Lengel, James G.
State Social Studies Consultant
State Department of Education
Montpelier, Vermont 05602
802-828-3115

Letourneau, Clifford E.
Administrator
Hosford Center for Deaf
2303 SE 28th Place
Portland, Oregon 97214
503-233-4619

Levine, Stephen A.
Vice President — Marketing
Counselor Films Incorporated
2100 Locust Street
Philadelphia, Pa. 19103
215-732-9191

Liddell, John C.
Career Education Director
Weatherford Independent School District
1007 S. Main Street
Weatherford, Texas
817-594-1068

Lillie, Gail D.
Career Development Program Coord., K-6
Scioto Darby City Schools
4790 Cemetery Road
Hilliard, Ohio 43026
614-876-1156

Liprie, Mary Lou
Teacher Educator
College of Home Economics
University of Delaware
Newark, Delaware
302-738-8437

Lorentz, John C.
Field Coordinator
Regional Education Service Agency
Region V
1210 - 13th Street
Parkersburg, West Virginia 26101
304-485-6513

Losekamp, Nancy
Upper Arlington Public Schools
2405 Wicliffe
Columbus, Ohio 43221

Lucas, Louise
Appalachia Educational Lab.
P. O. Box 1348
Charleston, West Virginia 25325
304-344-8371

Lulos, George S., Jr.
Glassboro State College
Bosshart Hall 104
Office of Career Education
Glassboro, New Jersey 08028
609-445-6211

Lynn, Robert E.
Coordinator
Education Department
321 State Office Building
Atlanta, Georgia 30334
404-656-2516

Martha McAfee
Research Assistant
HumRRO 300 N. Washington Street
Alexandria, Virginia 22314

McCann, James
Personnel Development Coordinator
State Department of Education
Rm. 1941
99 Washington Avenue
Albany, New York 12230
518-474-5705

McGibbon, Donald F.
Director
Career Education Project Office
9333 West Lincoln Avenue
West Allis, Wisconsin 53227
414-543-1151

Madden, Nelson
Kent State University
Business & Office Education
413 Educational Building
Kent, Ohio 44242

Maguire, Louis M.
Director, Career Education Program
Research for Better Schools, Inc.
Suite 1700 17th & Market
Philadelphia, Pennsylvania 19103
215-561-4100

Martinez, Nancy
Assistant Project Director
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Meifort, Barbara
Fulbright-Hays Exchange Scholar
Germany

Meister, Ellen
R & D Coordinator
Madison Public Schools
545 West Dayton Street
Madison, Wisconsin 53703
608-266-6011

Merrick, Barry
Principal
Upper Arlington Public Schools
2405 Wickliffe Road
Columbus, Ohio 43221
614-457-0526

Meuninck, James
Career Education Consultant
Indiana Career Resource Center
1209 S. Greenlawn Avenue
South Bend, Indiana 46615
219-289-2851

Meyer, Kathy
Coordinator—Middle School
2252½ Iroquois
Springfield, Ohio 45506

Miller, Vincent A.
General Manager
Consumer Affairs Training
Whirlpool Corporation
Benton Harbor, Michigan 49022
616-926-5352

Minton, W. Stewart
Coordinator of Field Services
Indiana University
Career Guidance Center
715 East 7th Street
Bloomington, Indiana 47401
812-337-9328

Misko, A. E.
Director, Career Planning
C & T College
Akron, Ohio 44323
216-375-7194

Mitchell, William
Director
Job Placement Department
482 Grant Street
Akron, Ohio 44311
216-379-5240

Moore, A. B.
Research Specialist
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Moorehead, Lola
Coordinator
Career Education
49 E. College Avenue
Springfield, Ohio 45504

Mossor, Leonard
Principal
Muscogee School District
Columbus Junior High School
1112 29th Street
Columbus, Georgia 31904
404-323-4351

Mueller, Robert J.
Career Education Specialist
Mt. Lebanon School District
7 Horsman Drive
Pittsburgh, Pa. 15228
412-344-8400

Mura, John William
Graduate Student
Bowling Green University
Bowling Green, Ohio 43402

Nash, Judy
Elementary Principal
Freedom Hill Elementary School
1945 Lord Fairfax
Vienna, Virginia 22180
703-893-8070

Navara, James L.
Director, Career Education
State Fair Community College
1900 South Clarendon Road
Sedalia, Missouri 65301
816-826-7100

Neavill, Arthur T.
Coordinator of Vocational Education
& Career Development
Dearborn Public Schools
22000 Garrison
Dearborn, Michigan 48124
313-582-0441 Ext. 355

Nemec, William E.
Coordinator of Career Ed. Workshops
College of Education
University of Akron
Akron, Ohio 44325
216-375-7777

Nevitt, Thomas A.
Department Head
University of Southwestern Louisiana
Box 3050
Lafayette, Louisiana 70501
318-233-3850

Newton, Mark
Research Associate
Western Kentucky University
Building No. 403
College of Education
Bowling Green, Kentucky 42101
502-745-3441

Nielsen, Duane M.
Chief, Vocational Guidance Personnel Dev.
U. S. Office of Education
Washington, D.C. 20202
202-245-9795

Oates, Carole
Career Education Counselor
Laramie County School District No. 1
253 Cheyenne, Wyoming 82001
307-632-0591

Oppenheim, Norman J.
Project Director
Career Education Dissemination Service (CEDIS)
117 Perry Street
Lowell, Massachusetts 01852

Osborn, Marcia
Curriculum/Inservice Coordinator
Exemplary Career Education Project
Bishop-Lehr-Room 106
University of Northern Colorado
Greeley, Colorado 80639
303-351-2321

Parlmer, Dennis K.
Editor-in-Chief
Career Education & Guidance
Houghton Mifflin Company
Boston, Massachusetts 02100
617-725-5890

Pendleton, J. Robert
Western Wisconsin Technical Institute
Sixth and Vine
La Crosse, Wisconsin 54601
608-782-6238 Ext. 118

Perry, Dianne K.
Consultant
Developmental Career Guidance
13600 Ward
Detroit, Michigan 48203
313-935-7474

Petersohn, Richard L.
Assistant Dean
Wright State University
West Ohio Branch
Celina, Ohio 45822

Peterson, Robert M.
Director, Career Education Program
Far West Laboratory
1855 Folsom Street
San Francisco, California 94103
415-565-3125

Petrie, Edwin T.
Project Director
Transportation Career Education
Curriculum Project
85 East Gay Street (708)
Columbus, Ohio 43215
614-466-2484

Powers, Robert
Allegheny Intermediate Unit
Suite 1300
Two Allegheny Center
Pittsburgh, Pennsylvania 15212
412-321-5700

Pritchard, David H.
Research & Development
U.S. Office of Education
Room 5008
7th & D Streets, NW
Washington, D.C. 20202
202-245-2617

Quie, Albert
Congress of the United States
House of Representatives
2182 Rayburn House Office Building
Washington, D.C. 20515

Radcliffe, Charles
Minority Counsel
House Education & Labor Committee
2181 B Rayburn House Office Building
Washington, D.C. 20515
202-225-6911

Raley, Mary C.
Career Coordinator K-6
Canton City Schools
2823 9th Street SW
Canton, Ohio 44710
216-455-8992 Ext. 378

Rask, Michael L.
State Director, Career Education
Department of Education
P. O. Box D.E.
Agana, Guam
472-8244

Reid, Marian
Research for Better Schools, Inc.
Suite 1700
1700 Market Street
Philadelphia, Pa. 19103
215-561-4100

Reinhard, Jeff
Career Development Program Coordinator
Scioto Darby City Schools
4790 Cemetery Road
Hilliard, Ohio 43026
614-876-1156

Richardson, Dennie
Weatherford Independent School District
1007 S. Main Street
Weatherford, Texas 76086
817-594-1068

Richmond, George
Educational Development Corporation
15 Mifflin Place
Cambridge, Massachusetts 02138
617-868-5800

Riley, Dorothy
Career Education Coordinator
Mansfield City Schools
Brinkerhoff School
Mansfield, Ohio 44905
419-522-1671

Riley, Ron
Insurance Company of North America
1600 Arch Street
Philadelphia, Pennsylvania 19603
215-241-4808

Rhodes, Ilana
ABT Associates, Inc.
55 Wheeler Street
Cambridge, Massachusetts 02138
617-492-7100

Robertson, Jane
Allegheny Intermediate Unit
Suite 1300
Two Allegheny Center
Pittsburgh, Pennsylvania 15212
412-321-5700

Romito, Andrew
Allegheny Intermediate Unit
Suite 1300
Two Allegheny Center
Pittsburgh, Pennsylvania 15212
412-321-5700

Rosenfeld, Joyce
Coordinator, Career Education
Columbus Area Chamber of Commerce
50 West Broad Street
Columbus, Ohio 43215
614-221-1351

Rouse, Clinton M.
Career Education Coordinator
Volusia County Board of Public Instruction
Educational Development Center
P. O. Box 1910
Daytona Beach, Florida 32015
904-255-6475

Ruda, Nancy L.
VTI Project Assistant
30 E. Broad Street
Columbus, Ohio 43215
614-466-3485

Sampieri, Robert
Coordinator
Comprehensive Career Education
Instructional Planning Division
Los Angeles Unified School District
450 North Grand Avenue, Room A301
Los Angeles, California 90012
213-687-4796

Sawyer, David E.
State Department of Education
State Office Building
Room 815
Wetumpka, Alabama 36092
205-832-3557

Schrodi, Tom
Coordinator
Orange Unified School District
370 N. Glassell
Orange, California 92667
714-997-6111

Schuermann, W. O.
Director, Career Education
Iowa State Department of Public Instruction
Grimes State Office Building
Des Moines, Iowa 50319
515-281-3381

Schumann, Robert
Pioneer J. V. S.
Shelby, Ohio 44875
419-347-7744

Schutte, Alfred J., Dr.
Director, Career Education
Board of Cooperative Education Services
1199 Prospect Avenue
Westbury, New York 11590
516-997-8700

Scott, Charles
Director, Career Development Center
Mississippi College
Clinton, Mississippi 39056
401-924-5131

Scott, Jerry D.
Director, Vocational Education
University of Tennessee
110 Henson Hall
Knoxville, Tennessee 37919
615-974-4443

Scott, Randolph
Agency Instructor
Salem College
Department of Human Services
Salem, West Virginia 26426
304-782-5240

Screws, Bill
Principal
Muscogee School District
Columbus Junior High School
1112 29th Street
Columbus, Georgia 31904
404-323-4351

Sears, Susan J.
Supervisor of Career Education
State Department of Education
65 South Front Street
Columbus, Ohio 43215
614-466-5718

Seim, Daniel
Career Development Education
Devils Lake Public Schools
Central High School
Devils Lake, North Dakota 58301
701-662-4971

Sessions, John
Assistant Director, AFL/CIO
Department of Education
Room 407
815 16th Street, NW
Washington, D.C. 20006
202-637-5146

Shaltry, Paul
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Shay, Willis G.
Director of Vocational Education
Joliet Township High Schools
201 E. Jeffarson Street
Joliet, Illinois 60432
815-727-4681 Ext. 249

Sindig, Monica
National Academy of Sciences
Washington, D.C. 20200
202-389-6934

Singer, Norman
Research Specialist/Project Director
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Slayter, Joseph O.
Director, Resources Center
Rapides Parish School Board
P. O. Box 1230
Alexandria, Louisiana 71301
318-442-8891

Southwell, Ann
Flint Community Schools
923 E. Kearsley Street
Flint, Michigan 48502
313-238-1631

Smalley, Mary Jane, Dr.
U.S. Office of Education
400 Maryland Avenue SW
Washington, D.C. 20202
202-245-2181

Smith, Carol Payne, Dr.
Associate Professor
Career Center, Western Michigan University
3734 Barrington Drive
Kalamazoo, Michigan 49007
616-383-4030

Smith, Doug
Appalachia Educational Lab.
P. O. Box 1348
Charleston, West Virginia 25325
304-344-8371

Smith, Paul L., Jr.
Career Education Consultant
Indiana Career Resource Center
1209 S. Greenlawn Avenue
South Bend, Indiana 46615
219-289-2851

Smith, Robert S.
Anne Arundel County Public Schools
2644 Riva Road
Annapolis, Maryland 21401
301-324-1707

Spann, Jerry
Research for Better Schools, Inc.
Suite 1700
1700 Market Street
Philadelphia, Pa. 19103
215-561-4100

Sparks, Don
Houghton Mifflin Company
5421 Kenwood Rd., Apt. 406
Cincinnati, Ohio 45227
513-561-5885

Spinner, George
Office of Career Education
301 East 293rd Street
Willowick, Ohio 44094
216-944-8561

Splete, Howard, Dr.
Professor
Wayne State University
Room 316—Education
Detroit, Michigan 48202
313-577-1658

Sproule, Joseph
Assistant Superintendent
Brighton Central Schools
191 Fairfield Drive
Rochester, New York 14618
716-442-1500

Starck, T. J.
District Career Education Specialist
Denver Public Schools
3245 E. Exposition Avenue
Office Career Education Department
Denver, Colorado 80209
303-777-4206

Stebbins, Linda
ABT Associates
55 Wheeler Street
Cambridge, Massachusetts 02138
617-492-7100

Stedman, Ken
Training Specialist
The University of Texas
103 Extension Bldg.
Austin, Texas 78712
512-471-4623

Stewart, Doyle K.
Lehigh University
222 Summit
Bethlehem, Pennsylvania 18015
215-691-7000

Stewart, Hester R.
University of Delaware
Newark, Delware 19711
302-738-8437

Stoltz, Robert E.
Vice President
Special Field Services
College Entrance Examination Board
17 Executive Park Drive NE
Suite 200
Atlanta, Georgia 30329
404-636-9465

Sullivan, Candace J.
National Institute of Education
1200 19th Street NW
Washington, D.C. 20208
202-254-5614

St. James, Harriet
High School Counselor
St. Louis Board of Education
911 Locust Street
St. Louis, Missouri 61301

Stowers, Phyllis
Appalachia Educational Lab.
P. O. Box 1348
Charleston, West Virginia 25325
304-344-8371

Strohmenger, Todd
Appalachia Educational Lab.
P. O. Box 1348
Charleston, West Virginia 25325
304-344-8371

Studyvin, William E.
Director of Practical Arts &
Vocational Education
7235 Antioch
Shawnee Mission, Kansas 66204
913-831-1900

Stump, Robert W.
National Institute of Education
1200 19th Street NW
Washington, D.C. 20208
202-254-2310

Tarang, Judy
Career Development Education
Devils Lake Public Schools
Central High School
Devils Lake, North Dakota 58301
701-662-4971

Taylor, Don R.
Coordinator, Career Education
Ft. Worth Public Schools
3210 W. Lancaster
Ft. Worth, Texas 76107
817-336-8311

Taylor, Juanita
State Department of Public Instruction
Education Building
Raleigh, North Carolina 27611
919-829-7893

Taylor, Robert
Director
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Terry, Arthur F.
Project Director/Research Specialist
Career Education National Forum
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Thomas, Elton R.
The Advisory Council for TVE
P. O. Box 1886
Austin, Texas 78767
512-475-2046

Thomas, Robert
Director
Career Development
7410 Market Street
Youngstown, Ohio 44512
216-758-0487

Tibby, Edward
1947 Center Street
Berkeley, California 94704
415-849-0950

Tilley, Herbert, Dr.
Director of Planning & Evaluation
Department of Education
Montpelier, Vermont 05602
802-828-3161

Toothman, Rex
Program Director, Vocational Education
University of Southern Florida
College of Education
Tampa, Florida 33620
813-974-2100

Topougis, Nick
Director, Career Education
Akron Public Schools
65 Steiner Avenue
Akron, Ohio 44301
216-434-3404

Troiano, Vincent
Deputy Administrator
Office of Career Education
110 Livingston Street
Brooklyn, New York 11201
212-522-5122

Trott, James
Coordinator, Industrial Arts
101 Petrie Hall
Auburn, Alabama 36830
205-826-4401

Tuchscherer, Jerry
Career Education Specialist
900 East Blvd.
Bismarck, North Dakota 58501

Vance, Joyce A.
Counseling Specialist
Michigan State University
207 Student Services
Lansing, Michigan 48823
517-355-8270

Venn, Grant
Calloway Professor of Education
P. O. Box 49
Georgia State University
University Plaza
Atlanta, Georgia 30303
404-658-2535

Veregge, Marvin L.
Leeward Community College
47-136 Iuiu Street
Kaneohe, Hawaii 96744
808-239-7606

Vetter, Louise
Research Specialist
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Vivian, Neal
Ohio State University
288 Arps Hall
1945 North High St.
Columbus, Ohio 43210
614-422-5432

Waddell, Dennis
Flint Community Schools
923 E. Kearsley Street
Flint, Michigan 48502
313-238-1631

Wagner, Patrick, Dr.
Assistant Professor
107 HH UW Stout
Menomonie, Wisconsin 54751
715-232-2373

Walker, Decker
Associate Professor
School of Education
Stanford University
Stanford, California 94305
415-497-2869

Walker, Jerry
Associate Director, Evaluation
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
614-486-3655

Walsh, Tom
Director of Education
U.S. Chamber of Commerce
1615 H Street, NW
Washington, D.C. 20202
202-659-6107

Wampler, Elizabeth
State Guidance Consultant
Division of Pupil Personnel Services
State Department of Publications
120 West Market Street
Indianapolis, Indiana 46204
317-633-4370

Warner, David
Coordinator 7-10
2823 9th SW
Canton, Ohio 44714
216-455-8992

Washburn, John S.
Research and Development Consultant
Div. of Voc. and Tech. Ed.
1035 Outer Park Drive
Springfield, Illinois 62704
217-782-4620

Wasil, Raymond A.
Director
Division of Guidance & Testing
State Department of Education
65 South Front Street
Columbus, Ohio 43215
614-466-4590

Watson, Maxine
Career Education Instructional Consultant
Cincinnati Board of Education
230 East 9th Street
Cincinnati, Ohio 45202
513-369-4739

Webb, Tom
Director, Career Development Program
Scioto Darby City Schools
4790 Cemetery Road
Hilliard, Ohio 43026
614-876-1156

Weir, Doug
Flint Community Schools
923 E. Kearsley Street
Flint, Michigan 48502
313-238-1631

Weisgerber, William
Supervisor, Career Development
Michigan Department of Education
Lansing, Michigan 48904
517-373-3370

Wellman, Florence
Career Development Coordinator
500 Grove
Cincinnati, Ohio 45215
513-761-7857

Welter, Clyde W.
Associate Professor
Colorado State University
Department of Vocational Education
Fort Collins, Colorado 80521
303-491-7181

Westerfield, Wiley
President
Educational Properties, Inc.
3303 Harbor Blvd. No. H6
Costa Mesa, California 92626
714-979-9770

Westrum, Larry
State Consultant of Career Education
State Department of Education
233 10th Street
Lincoln, Nebraska 68508
402-471-2452

Wick, Terry
Upper Arlington Public Schools
2405 Wickliffe Road
Columbus, Ohio 43221
614-486-9505

Williams, Bob
Research for Better Schools, Inc.
Suite 1700
1700 Market Street
Philadelphia, Pa. 19103
215-561-4100

Winefordner, David
Director
Career Decision-Making Program
Appalachia Educational Lab.
P. O. Box 1348
Charleston, West Virginia 25325
304-344-8371

Winter, Gene M.
Associate Director
Cornell Institute for Occupational Ed.
Department of Education
Cornell University
Ithaca, New York 14850
607-256-6515

Wise, Robert
Branch Chief
Career Education Program
Career Awareness Unit Leader
National Institute of Education
1200 19th Street NW
Room 645
Washington, D.C. 20208
202-254-5934

Wittke, Dieter
Fulbright-Hays Exchange Scholar
Germany

Wooden, Richard, E.
Secondary Curriculum Consultant
Box 2428
Great Falls, Montana
406-761-5800 Ext. 354

Workman, Debbie
The Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210

Wu, P. C., Dr.
Curriculum Specialist
Career Education Consortium
Manatee Junior College
P. O. Box 1849
Bradenton, Florida 33506
813-755-1511

Yelic, Sam
Director
Career Development Program
Medina City Schools
420 E. Union
Medina, Ohio 44256
216-725-8831

Ziegler, Dave
Coordinator
Career Development
7410 Market Street
Youngstown, Ohio 44512
216-758-0487

Zockle, Michael A.
Career Program Director
Warren City Schools
Warren, Ohio 44400
216-841-2260

Burrell, Lewis P.
Coordinator
Newark Public Schools
Wright Street
Newark, Ohio 43055
614-345-9831

Burrell, D. Margene
Health Services
Newark Memorial Hospital
West Main Street
Newark, Ohio 43055
614-344-6331

Hatch, Lois
Coordinator
Princeton School District
11080 Chester
Cincinnati, Ohio 45246
513-771-8470

ACCESSION NUMBER: VT102326

PUBLICATION DATE: 20JUN75

TITLE: CAREERS IN THE HOME FURNISHINGS INDUSTRY: INTERIOR DESIGN. FINAL REPORT.

PERSONAL AUTHOR: ISLEY, JOY

DESCRIPTOR: *INTERIOR DESIGN; *HOME FURNISHINGS; *HOME ECONOMICS EDUCATION; CAREER EDUCATION; HIGH SCHOOL STUDENTS

IDENTIFIER: CAREER EXPLORATION

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 6P.

ABSTRACT: FROM JANUARY TO JUNE 1975 STUDENTS ENROLLED IN THE ADVANCED HOME FURNISHINGS COURSE AT SHADOW MOUNTAIN HIGH SCHOOL IN PHOENIX, ARIZONA, EXPLORED CAREERS IN THE HOME FURNISHINGS INDUSTRY, WITH AN EMPHASIS ON THE ROLE OF THE INTERIOR DESIGNER. IN ADDITION, THEY WERE PROVIDED WITH THE "HANDS ON" EXPERIENCE OF DESIGNING A HOSPITALITY ROOM IN THE SCHOOL'S HOME ECONOMIC DEPARTMENT. THE STUDENTS RESEARCHED AND REPORTED ON JOB OPPORTUNITIES, REQUIREMENTS, AND SKILLS OF INTERIOR DESIGNERS THROUGH READING AND PERSONAL INTERVIEWS. THEY ALSO CONDUCTED A NEEDS AND USAGE SURVEY FOR THE HOSPITALITY ROOM IN THE SCHOOL. IN DESIGNING AND DECORATING THE ROOM, THEY STUDIED AND APPLIED THE PRINCIPLES OF DESIGN, AND VISITED RETAIL FURNISHINGS STORES. (NJ)

INSTITUTION NAME: SHADOW MOUNTAIN HIGH SCHOOL, PHOENIX, ARIZ.

SPONSORING AGENCY NAME: ARIZONA STATE DEPT. OF EDUCATION, PHOENIX. RESEARCH COORDINATING UNIT.

VT 102 326

JUL 15 1975

Careers in the Home Furnishings Industry: Interior Design

FINAL REPORT

Project No. 75-RMG-1308

Conducted Under
Section 131(b) Part C
Public Law 90-576

The project reported herein was performed pursuant to a grant from the Research Coordinating Unit, Division of Career/Vocational Education, Arizona Department of Education. Grantees undertaking such projects are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Arizona Department of Education position or policy.

Joy Isley
Shadow Mountain High School
2902 East Shea Boulevard
Phoenix, AZ 85028

June 20, 1975

VT 102 326

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Goals of Project 1

Objectives of Project 1

Student Activities during Project 1

Results of Project 2

Evaluation of Project 3

Recommendations. 4

GOALS

I. To explore careers available in the Home Furnishings Industry with an emphasis on the role of the Interior Designer.

II. To provide students with experiences in designing a Hospitality Room in a secondary school Home Economics department.

OBJECTIVES

I. During the school year, the students enrolled in the Advanced Home Furnishings course will comprehend the Home Furnishings Industry as evidenced by completion of a pre-test and post-test covering the Home Furnishings Industry, and a report by each student on this field.
2. The students in the Advanced Home Furnishings course will demonstrate their knowledge of the profession of Interior Designer as evidenced by defining the requirements, job skills, and certification needed by that profession.
3. During the school year, the hospitality director will provide laboratory learning experiences for students in the Advanced Home Furnishings course to perform, simulating the job duties of an Interior Designer as evidenced by submission of a design plan for the Hospitality room utilizing the design principles involved.

The intended scope of the project is to provide experineces for high school students in planning, designing, selecting, and constructing a living environment (the Hospitality room in the Home Economics Department); and to learn what the duties and responsibilities of an Interior Designer are in relation to the Industry.

In the new high school one of the rooms in the Home Economics Department will be left unfurnished so that the students can incorporate their learnings and decorate it correctly. Plans are to utilize students learnings with acutal "hands-on" performance.

Project Beginning Date-January 20, 1975
Project Completion Date-May 23, 1975
Advanced Home Furnishings enrollment during the above dates was 15, with 9 completing the course.
Instructional Staff-one Home Economics teacher
Student activities included the following:

-investigate job opportunities in the Home Furnishings Industry through surveys and readings in the library.
-research and report on the requirements, job skills, and certification of Interior Designers.

-interview Interior Designer's about their job skills, certification requirements, schooling, and recommendations for high school students planning to select Interior Design as a career.

-students conduct a needs and usage survey of student and faculty groups for a Hospitality Room within the school.

-identify design principles and apply these to co-ordinate the interior of the Hospitality room.

-visit furniture stores, carpet centers, and drapery shops to identify quality construction, current styles and colors in furnishings and fabrics.

Students performed the activities and lessons alluded to in the previous paragraph. As a result, the following things were accomplished:

- -reports of the Home Furnishings Industry covering the topics of the manufacturing process, retailing, publications of the Industry, agencies, showroom management, interior consultant, and interior design.
- -a job skills list, including requirements and certification for Interior Designers. About 100 colleges and universities as well as design schools responded with their bulletins/catalogs providing information about their degree programs or courses of study.
- -a file of the Interior Designers located in the area, complete with name, place of employment,phone number, and address.
- -a needs assessment for the use of the Hospitality room.
- -expertise gained from participation in field trips.
- -individual design plans that include layout design, fabric samples, furniture styles and arrangement, and a cost analysis sheet.
- -type of furniture for the Hospitality room, walls and floor covering colors, and lighting effects were selected by the students to be selected and purchased from the following year's budget.
- -notes gained from listeing and discussing with the the various guest speakers from the furniture retail business.

In the beginning of the project, it was obvious that the students were unaware of the total picture of the Home Furnishings Industry and what all it encompassed. Their knowledge of the duties and responsibilities of an Interior Designer was present, since three of the student had previously planned to make Interior Design their career.

The students were enthusiastic about being able to select the setting, the colors and furnishings for the room.

The students were evaluated on their progress in learning about the Industry; and the application of their learnings in a design plan for the Hospitality room.

The project was not without pitfalls which are listed below:

- the high school library was quite limited on the amount of books, pamphlets, and other literature dealing with information about the Home Furnishings Industry. Also, the library was not open for student use until the middle of the second semester dut to late arrival of the shelving; therefore, students were not allowed to check out the resource materials.
- students began a weekly log of their experiences in and out of theclassroom involving this project. Plans were to have this continue throughout the semester, but lack of response after a time shortened it to six weeks only. In these weekly entries, students explained how they located different materials for use in class, entered their feelings about the information obtained, and listed their attitudes about the work.
- several field trips were planned to take the students during school time to various homes on display, to furniture stores, drapery showrooms, etc. With the energy crisis, the school district voted to omit all extra-curricular use of the buses. As a result, students had to take these trips on their own and not during school. This limited the number of field trips for most students.
- There were many Interior Designers in the area, but when the students attempted to interview them they met with problems. Many were either out of their stores on decorating jobs, or speaking with a client, and were much too busy to spend time with high school students. However, a solution to this was the telephone interview. Several Interior Designers were very cooperative in providing information about their jobs over the phone.
- Many Interior Designers were asked to come to the school to give advice in planning the Hospitality room, and to discuss the students' plans. Only three gave up their time to assist the students.
- in the original plans prior to the construction of the building, the Hospitality room was to be left unfinished. However, the contractor went ahead and finished the walls, ceiling, and installed the carpet. This was to be done by the students.

The information gleaned by the students as to the jobs and skills of an Interior Designer was invaluable to them. They felt that the field trips would have been of more help to them if the project director and the rest of the students could have participated in organized trips during the class period.

It made the students realize that training and special talent and/or abilities were necessary to achieve status as an Interior Designer.

A project such as this could best be accomplished if the school was not in it's first year of operation. The project was not as successful as predicted and this was one of the major reasons.

The school library should have many resource materials available to the students for their readings and research.

Guest speakers from the Home Furnishings Industry should cooperate with the school as much as possible, and arrangements made in advance for their participation in the project.

It would be more successful if the project were started the first semester, and continued the second to enable the same students to select and purchase the furnishings.

It is recommended that the more advanced student with background knowledge of Home Furnishings participate in the project.

Plans for the continuation of the project are to have the next school year's Advanced Home Furnishings class take the design plan selected, the furnishings and colors, and actually purchase the items to complete the Hospitality Room. This will mean that an attempt for field trips will be made and hopefully granted.

Since furnishings are a major expense, only the basic pieces will be purchased out of the coming budget. It is hoped that the various groups that use the facility will contribute to the decorative items that will complete the setting.

ACCESSION NUMBER: [illegible]329

PUBLICATION DATE: 75

TITLE: SOUTHWESTERN OHIO REGIONAL VOCATIONAL EDUCATION PLANNING PROJECT.

DESCRIPTOR: *CONSORTIA; *VOCATIONAL EDUCATION; SECONDARY SCHOOL STUDENTS; *EDUCATIONAL PLANNING

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 8P.

ABSTRACT: A CONSORTIUM OF THIRTEEN VOCATIONAL EDUCATION PLANNING DISTRICTS IN SOUTHWESTERN OHIO WAS ORGANIZED IN ORDER TO FACILITATE PLANNING AND DEVELOPMENT OF A COMPREHENSIVE VOCATIONAL EDUCATION PROGRAM FOR HIGH SCHOOL YOUTH IN THE AREA. THE PRIMARY OBJECTIVES OF THE PROJECT WERE: 1) TO ENHANCE THE ECONOMIC EFFICIENCY OF VOCATIONAL PROGRAMING, 2) TO COORDINATE REGIONAL PLANNING WITH THE STATE, 3) TO BETTER MATCH VOCATIONAL PROGRAM OFFERINGS WITH CURRENT AND PROJECTED LABOR MARKET DEMANDS, 4) TO PROVIDE INFORMATION CONCERNING THE AVAILABILITY OF PROSPECTIVE VOCATIONAL TEACHERS, AND 5) TO FACILITATE INSERVICE EDUCATION PROGRAMS ON A REGIONAL BASIS. COVERING THE TIME PERIOD OF JULY 1974 TO JUNE 1975, THE PRINCIPLE PROJECT ACTIVITIES WERE COORDINATING STUDENT ENROLLMENT ACROSS DISTRICT BOUNDARIES, RECRUITING PROSPECTIVE TEACHERS, AND PROVIDING INSERVICE EDUCATION FOR VOCATIONAL TEACHERS. EVALUATION CONSISTED OF PERIODIC REVIEW AND ASSESSMENT OF PROJECT EFFECTIVENESS BY AN APPOINTED EXECUTIVE COMMITTEE AND REPRESENTATIVES FROM THE STATE DIVISION OF VOCATIONAL EDUCATION IN ACCORDANCE WITH PRESCRIBED EVALUATION CRITERIA. (AUTHOR/NJ)

INSTITUTION NAME: GREENE JOINT VOCATIONAL SCHOOL DISTRICT, XENIA, OHIO.

SPONSORING AGENCY NAME: OHIO STATE DEPT. OF EDUCATION, COLUMBUS. DIV. OF VOCATIONAL EDUCATION.

VT 102 329

TITLE OF PROJECT: Southwest Ohio Regional Vocational Education Planning Project R-5-75

FISCAL AGENT: Greene Joint Vocational School District

INITIATOR: Russell F. Garr
Signature

Mr. Russell F. Garr, Superintendent
Greene Joint Vocational School District
Telephone: (513) 372-7571

PROJECT DIRECTOR: Same as Project Initiator

TRANSMITTED BY: Russell F. Garr
Signature

Mr. Russell F. Garr, Superintendent
Greene Joint Vocational School District
Telephone: (513) 372-7571

DURATION OF ACTIVITY: July 1, 1974, through June 30, 1975

PURPOSE OF GRANT: Experimental

USE OF FUNDS: Experimental

TOTAL FUNDS EXPENDED $6587.77

VT 102 329

ABSTRACT

PROJECT TITLE: Southwestern Ohio Regional Vocational Education Planning Project

PRINCIPAL INVESTIGATOR: A Consortium of VEPD's in Southwestern Ohio

CONTRACTING AGENCY: Greene Joint Vocational School District

AMOUNT OF STATE FUNDS EXPENDED: $9,000.00

BEGINNING AND ENDING DATES: July 1, 1974, through June 30, 1975

PROBLEM:

To provide a comprehensive program of vocational education to all youth in southwestern Ohio commensurate with available resources and employment opportunities.

OBJECTIVES:

1. To provide a more comprehensive vocational program to all students in southwest Ohio.

2. To enhance the economic efficiency of vocational programming southwest Ohio.

3. To coordinate regional planning in southwest Ohio with the Ohio State Department, Division of Vocational Education.

4. To better match vocational program offerings with current and projected labor market demands.

5. To provide to participating districts information concerning the availability of prospective vocational teachers.

6. To facilitate, at the request of participating vocational education planning districts, in-service education programs on a regional basis.

ACTIVITIES:

Principle activities included:

- coordinating student enrollment across district boundaries,
- recruitment of prospective vocational teachers,
- in-servicing of vocational teachers.

EVALUATION TECHNIQUES:

Evaluation consisted of periodic review and assessment of project effectiveness by an appointed executive committee and representatives from the State Division of Vocational Education in accordance with prescribed evaluation criteria.

CONTRIBUTION OF EDUCATION:

This project should provide a basis for the establishment of similar **regional** vocational education planning districts throughout Ohio.

THE NARRATIVE

1. PROBLEM: The need today for educational programming and planning is soundly being heard throughout numerous educational communities. Such programming and planning emanates from ever-increasing expectations being placed upon these educational communities in terms of preparing individuals for useful and productive roles in society, competition for available resources for program development and expansion, and maintaining educational program relevancy in light of current and projected societal and employment needs.

Recognizing the importance and necessity of providing a comprehensive program of vocational education to high school youth in partially fulfilling the aforementioned expectations, vocational education planning districts in southwest Ohio are presented with the challenge of providing such program comprehensiveness within the operational framework and available resources afforded them.

In essence, the problem confronting the involved VEPD's is:

> to provide a comprehensive program of vocational education to all youth in southwest Ohio commensurate with available resources and realistic employment opportunities.

In order to facilitate planning and development of alternative solutions to the problem, as stated, a consortium of thirteen participating VEPD's was organized. This consortium, which was really an outgrowth of the State sponsored VEP project, set forth as its primary objective to make available to all high school youth in the participating VEPD's a comprehensive program of vocational education at a nominal cost. Participating VEPD's include: Greene, Southern Hills, Montgomery County, Warren County, U.S. Grant, West Clermont, Butler County, Middletown City, Hamilton City, Dayton City, Upper Valley, Mad River Local and Great Oaks.

Preliminary planning meetings involving representatives from all participating VEPD's and State Department of Education officials prefaced the preparation of this proposal.

2. OBJECTIVES: The objectives of the proposed Regional Vocational Education Planning Project were as follows:

a. To provide a more comprehensive vocational program to all students in southwest Ohio.

b. To enhance the economic efficiency of vocational programming in southwest Ohio.

c. To coordinate regional planning in southwest Ohio with the Ohio State Department, Division of Vocational Education.

d. To better match vocational program offerings with current and projected labor market demands.

e. To provide to participating districts information concerning the availability of prospective vocational teachers.

f. To facilitate, at the request of participating vocational education planning districts, in-service education programs on a regional basis.

3. DESCRIPTION OF ACTIVITIES: The project was coordinated through a project coordinator who was responsible to the project director and a duly appointed Education Committee.

In general, the coordinator addressed himself to three major concerns. They include:

- coordinating student enrollment across district boundaries,
- recruitment of prospective vocational teachers, and
- in-servicing of vocational teachers.

However, major emphasis was given to the coordinating of student enrollment across district boundaries.

More specifically, the coordinator was responsible for:

a. Accumulating and disseminating information regarding vocational program offerings by participating districts across the southwest Ohio region.

b. Establishing and maintaining communication links with participating VEPD's regarding program needs and availability.

c. Coordinating the transfer of students across VEPD district boundaries in accordance with program needs and availabilty.

d. Coordinating any necessary transportation and lodging arrangement requests for students who would be participating in an exchange program.

e. Coordinating information across the region and serve as a clearinghouse of information regarding the availability of prospective vocational teachers.

f. Facilitating in-service education programs on a regional basis commensurate with participating VEPD requests.

In addition to the project coordinator's role, the following guidelines were set forth governing the enrollment of students across district boundaries and for the general operation of the VEPD project.

a. Approval is necessary of both sending and receiving VEPD's for the students involved.

(1) Superintendent or his designated representative will sign approval.

(2) Training slots will be available <u>only</u> after local needs have been met and <u>only</u> to students who do not have the opportunity for the program in which they are interested within their own VEPD.

b. A service charge is to be paid by the sending VEPD.

(1) A service charge of $180 per semester, payable in advance, for each student will be assessed.

(2) Attendance in any semester will require payment for that semester.

(3) The service charge does not cover lab tools, shop fees,

uniforms, etc.

c. Other circumstances being equal, availability of program enrollment slots will be in a first come first service basis.

d. The sending VEPD will cooperate in coordinating transportation and housing for students involved, if necessary.

e. An executive committee of three representatives was selected from participating VEP districts. This Committee was the governing body and supervised all activities.

One function of this Committee was to establish an official job description and select a coordinator.

f. The Executive Committee met quarterly to review program status and provide program direction.

g. Budget considerations were reviewed annually.

h. Participating VEPD's were committed for a minimum of one year upon initial acceptance of the project by participating VEPD Boards of Education. After the first year, written notification of withdrawal must be given the project coordinator by no later than February 1, preceeding the school year for which such withdrawal is to be effective.

4. EVALUATION TECHNIQUES: Evaluation techniques employed in measuring this project's success included intermittant and terminal evaluative activities. Among other success measuring criteria, primary attention was directed toward the extent of participating VEP district and individual student involvement, and a degree of satisfaction assessment on the part of participating VEPD's regarding the project's overriding purpose, operational structure and value in their vocational programming endeavors. The development of specific evaluation criteria was a responsibility of the project coordinator.

An outside evaluation was also requested from the Division of Vocational Education, Ohio Department of Education.

5. CONTRIBUTION TO EDUCATION: As previously mentioned, this proposed project is an outgrowth of the State sponsored VEP project and provided information and a general structure for:

a. The continued development and expansion of vocational education throughout Ohio on a more coordinated basis;

b. Congruency of vocational programming with community, societal and labor market needs on a regional basis; and

c. Increased accountability in accordance with the general populace and legislative expectations.

The fact that thirteen VEPD's in southwestern Ohio were joined in a cooperative effort is in it's self a tremendous contribution to Vocational Education in this state.

There are twenty-five students enrolled across district boundaries for the 1975-76 school year.

A teacher bank has been established which includes a list of prospective teachers in all vocational trade areas.

In-service programs are being planned to supplement the teacher education program offered by the state. These programs will deal primarily with in-service for those teachers who have completed certification requirements and need updating in their trade.

Further steps to be taken to build upon project outcome, and the dissemination and utilization of finding regarding the project would be largely contingent upon the Ohio Department of Education's Division of Vocational Education's willingness to provide continued philosophical and financial support of this and similar project endeavors in other parts of the State.

THE PERSONNEL AND FACILITIES

The project coordinator was named. Qualifications for this person were as follows:

a. The coordinator must be able to obtain or presently hold a vocational guidance, vocational supervisor, director or administrative certificate.

b. The coordinator must have a working knowledge and understanding of vocational education from the standpoint of teaching, supervising or administering a program.

The coordinator's specific duties and responsibilities shall include:

a. Accumulate and disseminate information regarding vocational program offerings by participating districts across the southwest Ohio region.

b. Establish and maintain communication links with participating VEPD's regarding program needs and availability.

c. Coordinate the transfer of students across VEPD district boundaries in accordance with program needs and availability.

d. Coordinate any necessary transportation and lodging arrangement requests for students who would be participating in an exchange program.

e. Coordinate information across the region and serve as a clearinghouse of information regarding the availability of prospective vocational teachers.

f. Facilitate in-service education programs on a regional basis commensurate with participating VEPD requests.

g. Perform such other duties and responsibilities as required by the Executive Committee.

NOTE: All duties will be handled from a coordinative rather than an administrative perspective.

Special equipment and facilities required the rental of office space, furniture, and office equipment for the coordinator. This space must be available for the year, as the services of the coordinator will vary to meet the needs of the outlined objectives.

APPENDIX B

PROGRAM OR PROJECT EXPENDITURES

Title of Program or Project: Southwest Ohio Regional Vocational Education Planning Project

Applicant Organization: Greene Joint Vocational School District

Beginning and Ending Dates: July 1, 1974 through June 30, 1975

Category of Expenditure	197 STATE FUNDS	197 LOCAL FUNDS	TOTAL
1. Personnel (position titles; percent of time on project and yearly salary; for consultants, number of days and rate)	75.00 per day 71 days 5,325.00	-----	5,325.00
2. Employee Benefits (itemize benefits such as social security, retirement, group insurance, etc.)	N/A	N/A	N/A
3. Travel (in and out-of-state for regular and consultant personnel; fares and/or mileage at allowable rate; number of days per diem and rate)	-----	393.98	393.98
4. Supplies and Materials (describe) Office Supplies	442.77	------	442.77
5. Communications (itemize postage, telephone, etc.) Telephone	280.00	125.00	405.00
6. Services:			
a. Duplication and Reproduction		118.75	118.75
b. Statistical			
c. Testing			
d. Other (Consultant)	-----	300.00	300.00
7. Final Report - (fifteen copies)	-----	------	------
8. Equipment (rental; small, essential items may be purchased if less expensive)	-----	------	------
9. Other Direct Costs (itemize) Clerical Services	540.00	60.00	600.00
10. Indirect Cost (if any, give basis on which local overhead is computed, who established the rate and when.) Office Rental	-----	88.80	88.80
11. Total Expenditures	6,587.77	1,086.53	7,674.30

ACCESSION NUMBER: VT102338

PUBLICATION DATE: 30JUN75

TITLE: SOUTH CAROLINA SEMIANNUAL RESEARCH COORDINATING ACTIVITY REPORT.

DESCRIPTOR: *RESEARCH COORDINATING UNITS; *RESEARCH PROJECTS; *REPORTS

IDENTIFIER: SOUTH CAROLINA

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 5P.

ABSTRACT: THIS DOCUMENT OUTLINES THE ACTIVITIES OF THE SOUTH CAROLINA STATE-ADMINISTERED RESEARCH AND DEVELOPMENT PROGRAM FOR THE SIX-MONTH PERIOD ENDING JUNE 30, 1975. NEW PROJECTS ARE LISTED BY FUNDING SOURCE, TITLE, AND LOCATION OF PROJECT GRANTEE/CONTRACTOR. RESEARCH AND DEVELOPMENT RELATED ACTIVITIES AS WELL AS MAJOR PROJECTS/ACTIVITIES PLANNED FOR THE NEXT SIX MONTHS ARE ALSO LISTED. (LJ)

INSTITUTION NAME: SOUTH CAROLINA STATE DEPT. OF EDUCATION, COLUMBIA. OFFICE OF VOCATIONAL EDUCATION.

SPONSORING AGENCY NAME: BUREAU OF OCCUPATIONAL AND ADULT EDUCATION (DHEW/OE), WASHINGTON, D.C.

VT 102 338

(Optional Interim Use - 6/74)

ROUTING COVER SHEET

SEMIANNUAL REPORT

STATE-ADMINISTERED
RESEARCH & DEVELOPMENT ACTIVITIES

DATE: 7/15/75

FROM: L. L. Lewis
State Director, Vocational Education

State: South Carolina

TO : Donald H. Snodgrass
Regional Director, OAE

Region: # IV

SUBJECT: Forwarding of Semiannual Research Coordinating Unit Activity Report for the Six Month Period Ending:

[ ] December 31, 19__
or
[x] June 30, 1975

Attached are THREE (3) copies of the Semiannual Research Coordinating Unit Activities Report for submission to USOE in compliance with P.L. 90-576 regulations.

DATE: _____

FROM: _____
Regional Director, OAE

Region # _____

TO : Chief, Demonstration Branch, DRD/BOAE/OE
Room 5020, ROB #3, 7th & D Streets SW
Washington, D.C. 20202

Attention: Coordinator, State Vocational Research Programs

One (1) copy has been retained and the remaining TWO (2) copies are forwarded for use in preparing the USOE Semiannual Summary of State-Administered Research and Development Activities.

VT 102 330

SEMIANNUAL RESEARCH COORDINATING UNIT ACTIVITY REPORT FOR: South Carolina State

FOR PERIOD ENDING: [ ] December 31, 19__ yr

[✓] June 30, 1975 yr

(Add extra page if required)

PROJECTS COMPLETED PAST SIX MONTH PERIOD

CHECK FUNDING SOURCE				TITLE OF PROJECT	LOCATION OF PROJECT GRANTEE/CONTRACTOR
131 (b)	142 (d)	Ancil.	Other		
✓				Prevocational Instrument Development	Dr. James Grant Calhoun-Orangeburg Voc. Ctr. Orangeburg, SC 29115
			*✓	Student Placement	Mr. Danny Ard, State Coord. Appalachian Region of S.C. (Oconee, Greenville, Pickens, Orangeburg, Anderson, Cherokee Co.)
			*✓	Adult Vocational Programs	(Same as above)
	✓			Career Education	Mr. George Coan, Director Spartanburg Sch. Dist. #5 Duncan, SC 29334
			*✓	Career Cluster Curriculum Development Project - Phase III	Mr. J. Chastain, Director Room 202 1429 Senate St. Columbia, SC 29201

* Appalachian Regional Commission Funds 211 (A)

NEW PROJECTS FUNDED PAST SIX MONTH PERIOD

CHECK FUNDING SOURCE				TITLE OF PROJECT	LOCATION OF PROJECT GRANTEE/CONTRACTOR
131 (b)	142 (d)	Ancil.	Other		
✓				Prevocational Instrument Development	Dr. James Grant, Director Calhoun - Orangeburg Voc. Ctr. Orangeburg, SC 29115
			* ✓	Exploratory Programs in Vocational Education	S. C. Department of Education 908 Rutledge Building Columbia, SC 29201
			* ✓	A Proposal for In-Service Teachers for the Disadvantage and Handicapped Youth	S. C. Department of Education 908 Rutledge Building Columbia, SC 29201
			** ✓	Student Placement Program	S. C. Department of Education Office of Voc. Ed., Room 908 1429 Senate Street Columbia, SC 29201
	✓			The Development and Pilot Testing of Orientation/In-Service Materials for Career Education	S. C. Office of Voc. Ed. Career Education 1429 Senate Street Columbia, SC 29201
	✓			Career Education Pilot Project	Mr. George Coan, Director Spartanburg Sch. Dist. #5 Duncan, SC 29334
			* ✓	"Career Cluster Articulation Model Based on Behavioral Objectives - Phase IV"	Mr. J. Chastain, Director 1429 Senate Street Columbia, SC 29201

* Part C 131(a) Commissioners Discretionary Research Funds

** Appalachian Regional Commission Funds 211 (a)

CONTINUATION

SEMIANNUAL RESEARCH COORDINATING UNIT ACTIVITY REPORT FOR South Carolina State

RESEARCH AND DEVELOPMENT RELATED ACTIVITIES
(Include those that may have significance for other States)

1. Career Cluster Curriculum Development Project (development phase) was completed by June 30, 1976. Orientation workshops were conducted to inform administrators and teachers about the concept pertaining to self-instructional learning, how the materials developed are intended to be used, and the responsibilities for each during the implementation/evaluation phase (FY'76).

2. The evaluation design phase of the Career Cluster project was conducted between January and June 1975, to design an evaluation plan with survey and test instruments and a record keeping system which will be used to evaluate the effectiveness of the curriculum development effort in relationship to six predetermined research questions.

3. A survey was conducted to determine the effectiveness of the VIEW Project delivery system, in 163 randomly selected schools participating in the VIEW Project effort. Total responses were 3,456, from students enrolled in middle schools, junior high schools, high schools and vocational centers, grades 7, 9, and 11.

4. An addendum to the VIEW deck of aperture cards was completed. It includes descriptions of each vocational center, courses offered and feeder schools served.

5. A complimentary method to the VIEW aperture information cards was developed in an attempt to devise an economically feasible way to provide "take-home" copies of information contained on VIEW cards when a direct reproduction process is not available to the students or users.

6. A Career Education position paper for South Carolina was completed and the document, which explained the philosophy or stances of the State Department of Education was presented to the State Superintendent of Education for his signature and to the State Board of Education for general information in June 1975.

MAJOR PROJECTS/ACTIVITIES PLANNED FOR NEXT SIX MONTHS

1. Consultants will be hired and workshops conducted to develop Career Education orientation/in-service materials consisting of an administrator manual, counselor manual and teacher digest. The materials will be pilot tested in a minimum of ten school districts.

2. Career Cluster Curriculum Development staff will be conducting workshops during the summer to familiarize teachers with the newly developed materials and train them on the use of the materials.

3. The continuation of the VIEW Project with emphasis on revising outdated information;

adding an addendum of post secondary training institutions within the state. Two thirty second taped recordings will be prepared for spot radio announcements.

4. The Student Placement project will be activated by conducting meetings with local center directors and project coordinators to review guidelines, project requirements and responsibilities for participants. On-site team visits will be made to assess the progress being made at each pilot site.

5. Selection and approval of research efforts to be funded during FY'76.

6. Receipt and review of proposals to be considered for funding during FY'77.

ACCESSION NUMBER: VT102349

PUBLICATION DATE: 07AUG74

TITLE: CLUSTER CURRICULUM DEVELOPMENT. FINAL REPORT.

PERSONAL AUTHOR: NAGLE, ROBERT A.

DESCRIPTOR: *OCCUPATIONAL CLUSTERS; *CURRICULUM DEVELOPMENT; CAREER EDUCATION; *VOCATIONAL HIGH SCHOOLS; COUNTY SCHOOL SYSTEMS; EDUCATIONAL PLANNING; FLEXIBLE SCHEDULING; SCHOOL EXPANSION; *SCHOOL PLANNING

IDENTIFIER: LEHIGH COUNTY; PENNSYLVANIA

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 13P.

ABSTRACT: LEHIGH COUNTY VOCATIONAL-TECHNICAL SCHOOL ENGAGED IN A NINE-MONTH PROJECT OF CURRICULUM DEVELOPMENT BASED ON THE OCCUPATIONAL CLUSTERS CONCEPT. ESTABLISHED CAREER EDUCATION PROGRAMS IN FOUR HIGH SCHOOLS AND ONE VOCATIONAL SCHOOL IN GEORGIA WERE VISITED AND CURRICULUM MATERIALS FROM EIGHT UNIVERSITIES AND THE UNITED STATES GOVERNMENT PRINTING OFFICE WERE PURCHASED. BASED ON THIS INFORMATION, INDIVIDUALIZED INSTRUCTION MATERIAL HAS BEEN INTRODUCED TO REDUCE THE THREE-YEAR CURRICULUM TO TWO YEARS. WORKSHOPS WERE PROVIDED FOR INDUSTRIAL ARTS, HOME ECONOMICS, AND BUSINESS INSTRUCTORS TO ENABLE THEM TO DEVELOP STUDENT CAREER AWARENESS AT EIGHTH AND NINTH GRADE LEVELS. A NEW BUILDING TO SERVE THE NEEDS OF THE MULTI-OCCUPATIONAL EXPERIENCES PROGRAM WAS DESIGNED. THE SCOPE AND NATURE OF THE PROJECT IS LEHIGH COUNTY VOCATIONAL-TECHNICAL SCHOOL'S JUSTIFICATION IN SEEKING PROJECT CONTINUANCE. A STAFF MEMO AND "PRINCIPAL ACTIVITIES AND TIME SEQUENCE CHART" FOR THE PROPOSED MULTI-OCCUPATIONAL EXPERIENCE WING ARE APPENDED. (KJ)

INSTITUTION NAME: LEHIGH COUNTY VOCATIONAL-TECHNICAL SCHOOL, SCHNECKSVILLE, PA.

VT 102 349

FINAL REPORT

Cluster Curriculum Development
Project No. 19-3023
Project No. 10-4194

Robert A. Nagle
Lehigh County Vocational
Technical School
2300 Main Street
Schnecksville, Penna. 18078

August 7, 1974

VT 102 349

INTRODUCTION

The need to develop Vocational Education cluster career curriculum is substantiated by all the research coming out of our leading university and national leadership. The Department of Health, Education, and Welfare points out that most students in school today will change occupations five (5) to seven (7) times during their working lives. This clearly calls for flexibility in our Vocational curriculum rather than present highly specialized programming. We live in a mobile society, thus our Vocational curriculum should not only provide for local industrial opportunities but also for a large geographic area. With the rapid change of our technology and unforeseen jobs being created, out future dictates to us to become more generalized in curriculum rather than highly specialized. The largest factor of concern is the lack of student maturity when we ask them to make career choices during ninth grade.

It is our opinion at the Lehigh County Area Vocational-Technical School that the development of career clusters for first level students will enhance our program serving the students of Lehigh County. In such a program each student is ehlped to develop a very broad awareness of the full range of career options in the world of work. At the same time he is helped to develop his own self awareness, to become cognizant of his own strengths and weaknesses, his aptitudes and capabilities, and his interests and needs, so that he can make realistic consideration of himself in relation to the many career options available in the world of work.

Our major objective for development of such a program is to assist students in finding meaningful career paths to follow. It is further hoped to provide entry level skills in a wider range of job classifications.

In order to better understand the cluster concept, arrangements were made to visit schools where the concept is in operation.

Mr. Nevin R. Frantz, Jr., an Associate Professor at the University of Georgia, and one of the leading researchers in the cluster concept, was contacted and a visit to Georgia scheduled. We were to tour 4 High Schools and 1 Vocational School where the concept is in operation. While there we where privileged to meet with the State officials of Adult and Vocational Education. They made available to us their individualized instructional system. This system has been field tested and evaluated for 10 Multi-Occupational programs.

Other background Curriculum materials were purchased from 8 Universities and the United States Government Printing Office.

Currently this material is being reviewed in depth and combined into a curriculum that will meet the needs of the student body and industrial community of Lehigh County.

After preliminary review of the materials, it was decided to offer the Multi-Occupational Concept to all first level students and that specialization in an area would be reduced to two years. At this point it was necessary to rewrite our educational plan, which received approval in April, 1974. The reduction of a three year curriculum into a two year program meant further revision of the present curriculum. To accomplish this it was decided to develop individualized instructional material to enable the student to advance according to his or her ability.

A workshop was held for our present staff at the end of the school year. The purpose was to enable them to begin to evaluate and consolidate their curriculum into a two-year program in terms of individualized instructional material.

Simultaneously, a pre-vocational workshop for industrial arts, home economics and business instructors was also conducted. The purpose of this workshop was to provide the instructors with information and resource material to enable them to develop student career awareness in their 8th and 9th grade programs.

In order to make the present specialization areas available on a first level basis, our approach could not follow completely the United States Office of Education cluster arrangements. A copy of the Multi-Occupational Experience groupings which have been approved is attached as appendix A.

In order to keep people informed and aware of our past and projected progress, a Principal Activities Time Sequence Chart was developed and is attached as appendix B. Our next step was to develop a building which would be functional and flexible for the Multi-Occupational Experience program. Architects were appointed by our Joint-Operating Committee and are currently

working on schematic drawings. Because of the volume and depth of this study and curriculum development it was not possible to complete the project in the span of nine months. In order to fully develop and evaluate our curriculum material this project should be continued.

Appendix A

LEHIGH COUNTY VOCATIONAL-TECHNICAL SCHOOL

TO: All Vocational-Technical School Joint Operating Committee Members and Staff Personnel

FROM: Rodney E. Meagher

RE: Approved Multi-Occupational Experiences

DATE: April 18, 1974

On April 9, 1974, the Educational Plan for the Lehigh County Vocational-Technical School's expansion was approved. The following is a listing of the approved occupational arrangements:

1. Construction Occupations 1st level (10th grade)

   Carpentry
   Electrical Construction
   Masonry
   Plumbing

   Feeding 2nd (11th grade) and 3rd (12th grade) speciality labs - Carpentry, Cabinetmaking, Electrical Construction, Masonry, Automatic Heating, and Plumbing.

2. Transportation Occupations 1st level (10th grade)

   Automotive Body
   Automotive Mechanic
   Diesel Mechanic
   Small Engine Repair

   Feeding 2nd (11th grade) and 3rd (12th grade) speciality labs - Auto Body, Auto Service, Auto Mechanics, Diesel Mechanic, and Small Engine Repair.

3. Service Occupations 1st level (10th grade)

   Health Assistant
   Personal Services
   Textile Production

   Feeding 2nd (11th grade) and 3rd (12th grade) speciality labs - Health Assistant, Cosemtology, and Textile Production.

4. Creative Occupations 1st level (10th grade)

   Business Data Processing
   Commercial Art
   Drafting
   Graphic Arts

Feeding 2nd (11th grade) and 3rd (12th grade) speciality labs - Business Data Processing, Commercial Art, Interior Design, Architectural Drafting Technology, Drafting Design, and Graphic Arts.

5. Electro-Mechanical Occupations 1st level (10th grade)

   Air Conditioning-Cooling (Refrigeration)
   Electronics
   Machine
   Sheet Metal

   Feeding 2nd (11th grade) and 3rd (12th grade) speciality labs - Air-Conditioning and Refrigeration, Appliance Repair, Electronic Radio and TV, Electronic Technology, Machine, Sheet Metal, Welding, and *Building Maintenance.

6. Production/Marketing Occupations 1st level (10th grade)

   Agriculture Production
   Horticulture
   Distributive Education
   Food Production/Services

   Feeding 2nd (11th grade) and 3rd (12th grade) speciality labs - Vocational Agriculture, Horticulture and Floriculture, Horticulture Landscaping, Distributive Education, Warehousing, and Food Industries.

7. Occupational Transitional

   This program will be designed to give a range of Multi-Occupational Experiences for the disadvantaged and handicapped. Students in this area would remain until they are prepared to move into a speciality shop that they can handle and/or move directly to Diversified Occupations and/or stay in this area until they leave school.

* Building Maintenance can be considered a spin-off of either the Construction or Electro-Mechanical Occupation.

PRINCIPAL ACTIVITIES TIME SEQUENCE CHART	JAN. 73	FEB.	MAR.	APR.		SEPT.	OCT.	NOV.	DEC. 73
								MONTHS –	
SURVEYS PROPOSALS	MANPOWER NEEDS OF INDUSTRY-ABE-SMSA		STUDENT SURVEY LC AVTS				AREA MAN POWER REVIEW ABE LABOR MARKET AREA	REVIEW SURVEYS	DEVELOP PROGRAM
COMMITTEES	RE-ORGANIZE J.O.C.			MEET W/ GAC					
ADMINISTRATIVE STAFF							RE-ASSIGN ASSIST. TO DIRECTOR TO M.O.E.		
CLERICAL STAFF FILING SYSTEM							EMPLOY INITIAL CLERK		
BUDGET									
FUNDING									
COUNSEL INVESTMENTS									
ARCHITECT SITE							APPOINT. ARCHITECT APPROVE SITE		
BUILDING									
CURRICULUM									
EQUIPMENT									

NOV.	DEC. 73	JAN. 74	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NO
MONTHS –		1	2	3	4	5	6	7	8	9	10	
REVIEW SURVEYS	DEVELOP PROGRAM	DEVELOP PROPOSAL	STATE APPR. OF PROPOSAL (PRELIM.)	STATE APPR. OF PROPOSAL (FINAL)								
		RE-ORGANIZE JOC MEET W/ CAC	MEET W/ GAC					APPROVAL OF SCHEMATIC DRAWINGS – ARTS SCHOOL	J.O.C. & BOARDS			
		EMPLOY M.O.E. COORDINATOR										
		ESTABLISH FILING SYSTEM										
		PROVIDE INPUT OPER. BUDGET										
										REQUEST STATE FUNDS		
		EMPLOY LEGAL COUNSEL						SELECT BOND COUNSEL		SELL BONDS	INVEST BUILDING FUNDS	
				TEST BORING						SITE SURVEY		
					PLAN FACILITIES (SCHEMATIC DRAWINGS)		PREPARE EQ. (ROOM SCHEDULE)	PREPARE PRELIMINARY DRAWINGS & SPECIFICATIONS	PRELIMINARY RENDERINGS	PREPARE 1/8" WORKING DR PREPARE 1/4" SHOP SCALE DRAWINGS		
								DEVELOP OUTLINES	M.O.E. COURSE			
									IDENTIFY EQUIPMENT	NEEDS		

SEPT.	OCT.	NOV.	DEC. 74	JAN. 75	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.
9	10	11	12	13	14	15	16	17	18	19	20
				RE-ORGANIZE JOC							
										EMPLOY ADD. COOR.	
				EMPLOY ADD. CLERK							
				PROVIDE INPUT OPER. BUDGET							
REQUEST STATE FUNDS											
SELL BONDS	INVEST BUILDING FUNDS										
SITE SURVEY											
PREPARE 1/8" WORKING DRAWINGS & SPECS.				ADVERTISE CONSTRUCTION BIDS	RECEIVE BIDS EVALUATE	AWARD BIDS		CONSTRUCTION OF BUILDI			
PREPARE 1/4" SHOP SCALE DRAWINGS						GROUND-BREAKING					
OURSE								DEVELOP COURSES OF STUDY			
EQUIPMENT	NEEDS	WRITE	EQUIPMENT SPECIFICATIONS				ADVERTISE EQUIPMENT BIDS	RECEIVE BIDS EVALUATE		AWARD BIDS	

N.76	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.76
25	26	27	28	29	30	31	32	33	34	35	36
RGANIZE											
					EMPLOY ADD. CLERK	EMPLOY ADD. CLERK (GUIDANCE)					
DE-INPUT P. DGET											
				OCCUPY BUILDING: ADMIN. & CLERICAL STAFF				ACCEPT BUILDING			

SUPPLIES									
STUDENTS (STUDENT SERVICES)									
PROFFESIONAL STAFF COUNSELING STAFF									
NON-TEACHING PERSONNEL (SUPERVISORY)									
NON-TEACHING PERSONNEL (MAINTENANCE)									
DEDICATION									
	PRINCIPAL ACTIVITIES AND TIME SEQUENCE CHART FOR LEHIGH COUNTY AREA VOCATIONAL-TECHNICAL SCHOOL - PROPOSED MULTI OCCUPATIONAL EXPERIENCES WING DEVELOPED - MARCH 1974 J.J.K.								
Appendix B									

IDENTIFY SUPPLY NEEDS

WRITE SUPPLY SPECIFICATIONS

ADVERTISE SUPPLY BIDS

RECEIVE BIDS EVALUATE

AWARD BIDS

PREPARE CURRICULUM BROCHURE

DISTRIBUTE CURRICULUM BROCHURE

RECRUIT

RECEIVE SUPPLIES (8 MONTHS)

RECRUIT, SELECT, & ADMIT STUDENTS

RECRUIT PROFESSIONAL STAFF

EMPLOY PROF. STAFF

IN-SERVICE FOR PROF. STAFF

RECRUIT COUNSELING STAFF

EMPLOY COUNSELING STAFF

EMPLOY NON-TEACHING PERSONNEL (SUPERVISORY)

EMPLOY NON-TEACHING PERSONNEL (MAINTENANCE)

PLAN DEDICATION

DEDICATION

J.J.K.

ACCESSION NUMBER: VT102352

PUBLICATION DATE: JUN74

TITLE: FILMSTRIP DEVELOPMENT AS AN AID TO COORDINATE THEORY AND PRACTICE ON THE METALWORKING LATHE. FINAL REPORT.

PERSONAL AUTHOR: HUGHES, VAN

DESCRIPTOR: AUDIOVISUAL INSTRUCTION; *FILMSTRIPS; INDIVIDUALIZED INSTRUCTION; *MACHINE TOOLS; *SHOP CURRICULUM

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 11P.

ABSTRACT: A SOUND-FILMSTRIP WAS DEVELOPED AT OLIVER HIGH SCHOOL TO ENABLE SHOP STUDENTS TO COORDINATE THEORY AND PRACTICE ON THE METALWORKING LATHE. THE STUDENT VIEWS THE PROGRAM WHILE PERFORMING AT THE MACHINE. A DU-KANE FILM-O-SOUND PROJECTOR, EASILY OPERATED BY THE STUDENT, IS USED TO PRESENT THE PROGRAM WHICH CAN BE REPEATED AS OFTEN AS NECESSARY. THIS FINAL REPORT OF THE PROJECT INCLUDES AN APPENDIX WHICH DEMONSTRATES HOW THE FILMSTRIP IS COORDINATED WITH THE TAPED SCRIPT. (AUTHOR/NJ)

INSTITUTION NAME: OLIVER HIGH SCHOOL, PITTSBURGH, PA.

SPONSORING AGENCY NAME: PENNSYLVANIA RESEARCH COORDINATING UNIT FOR VOCATIONAL EDUCATION, HARRISBURG.

VT 102 352

FINAL REPORT

Filmstrip Development

as an aid

To Coordinate Theory and Practice

on the metalworking lathe

(Project No. 19-3010)

Van Hughes
Oliver High School
2323 Brighton Road
Pittsburgh, Pennsylvania 15212

R. G. Lamping, Director
Division of Occupational, Vocational, and Technical Education
Pittsburgh Public Schools
341 S. Bellefield Avenue
Pittsburgh, Pennsylvania 15213

June, 1974

PENNSYLVANIA DEPARTMENT OF EDUCATION

BUREAU OF VOCATIONAL EDUCATION

RESEARCH COORDINATING UNIT

VT 102 352

CONTENTS

A - Report

B - Appendix Film sequence/Script

The sound-filmstrip "The Maximat Lathe" has been developed to coordinate theory and practice on the metalworking lathe at Oliver High School. The filmstrip consists of thirty two frames and is accompanied with a fifteen minute tape. A Du-Kane film-o-sound projector is used to present the program to the student. The student views the program while standing at the lathe. He actuates the filmstrip by use of a remote footswitch control which has been adapted to the projector. To facilitate movement and storage a mobile storage cabinet has been provided for holding the projector and storing filmstrip and tapes.

All levels of students have access to the unit and program at any time simply by notifying the instructor. All students at one time or another have shown interest in viewing the program. Much enthusiasm was also shown in developing the program with some of the usually reluctant students more than willing to help.

Because of the last frame in the series which bids the student to "ask your teacher to check what you have learned," the pathway for communication between the student and teacher is open thus relieving the anxiety of even the most cautious student.

Students have little difficulty in operating the Du-Kane unit and are actually anxious to do so. Educable Mentally Retarded students have no difficulty, and understand the program much better than through the media of the written textbook. An advantage which the program has over the demonstration - performance method is that each student gets his own individual lesson and can perform at the machine while it is being given, and may repeat the lesson on his own as often as necessary.

The author feels that this program has been successful to the extent that additional programs will be developed on the lathe and similar sound-filmstrips will be developed for other machines in the shop. The author also intends to request further departmental review and reproduction of the existing sound-filmstrip program.

In terms of technology, the program was developed using a Konica II, autoreflex camera using Kodak highspeed ektachrome EHB 135-36 exposure film. Four 200 watt floodlights were used against a light gray background made up of stage flats. Magnetic letters were used to shoot the titles.

An appendix has been included to give an idea of how the filmstrip is coordinated with the taped script.

APPENDIX

FILM	SCRIPT
1. THE MAXIMAT LATHE By: Van Hughes 1974 Oliver High School	This filmstrip "The Maximat Lathe" has been developed to coordinate theory and practice on the metalworking lathe. It was made possible through a research grant from the Department of Education, Commonwealth of Pennsylvania. (Advance the filmstrip)
2. Metalwork Textbook on desk	(Frame-2) The viewer is encouraged to consult Unit 57 in the text, Metalwork, Technology and Practice by Ludwig and McCarthy. It is also recommended that the viewer use this filmstrip as a resource by stopping it when something is of interest, by backing it up if necessary, and by asking for help if something is not clearly understood. The viewer should note that there will be a ten second delay in the sound.

FILM	SCRIPT
	Portion of this program to give time to compare the filmstrip to the machine. You may want to stop the tape to extend the delay. The viewer should also note that every other frame is numbered to coordinate the sound and picture.
3. Full shot- (Entire machine)	(Advance the Filmstrip) The Maximat metalworking lathe is a basic machine tool. A machine tool is a machine which is used for cutting metal; it holds both the workpiece and the cutting tool.
4. Closer shot- (From table up)	(Advance to Frame 4) A student lathe operator is advised to first learn the names and functions of the principal component parts, units, and controls of the lathe. When this is done, it is more probable that he will not damage the machine or injure himself.

FILM	SCRIPT
5. Close up ways- use pointer Corner - toward headstock	(8 sec. Advance the Film) The "ways" which are found at the top of the lathe bed, are the tracks upon which the carriage and tailstock move along the bed.
6. Headstock (side view) -pointer- See operators Manual - page 14	(5 sec. Advance to Frame 6) This is the headstock. It is secured to the left end of the bed.
7. Overhead High-up-	(8 sec. Advance the Film) The Maximat headstock, 1/2 horse-power motor, pulleys, and belt guard which are all shown here fit together to form a complete unit.
8. Picture screw end- Close-up	(7 sec. Advance to Frame 8) The spindle is fitted into the head-stock in precision bearings. It rotates the work being machined. The spindle nose has a thread of 1 1/8" DIA x 12 Thds. /inches.

FILM	SCRIPT
9. End view- (pointer)	(5 sec. Advance) The spindle is hollow and has a tapered hole at the work end.
10. Tailstock (lapse?) pointer	(7 sec. Frame #10) The tailstock can be moved along the lathe bed and clamped at any point on the bed.
11. Hand of clamp lever	(Advance the Film) The tailstock clamping lever must be pushed forward to release the tailstock and pulled back to clamp the tailstock in place.
12. Pointer at edge of Tailstock taper -	(6 sec. Advance to Frame #12) In the tailstock is the tailstock spindle, the end of which has a tapered hole.
13. Handwheel with hand on it-	(10 sec. Advance the Filmstrip) The tailstock handwheel advances the tailstock spindle when turned clockwise and withdraws the spindle when turned counterclockwise.

FILM	SCRIPT
14. Spindle Clamp	(Advance to Frame #14) The spindle locking screw is turned clockwise to secure the tailstock spindle in place. Turning it counter-clockwise allows the spindle to be moved in or out of the tailstock.
15. Carriage only with pointer	(17 sec. Advance the Film) The carriage is movable by hand or under power. It slides back and forth on the ways between the headstock and tailstock. Moving the carriage back and forth across the ways is called longitudinal feed.
16. Point at apron	(3 sec. Advance to 16) Suspended from the carriage is the apron.
17. Handwheel with hand on it-	(6 sec. Advance the Filmstrip) On the front of the apron is the handwheel for manual longitudinal feed.

FILM	SCRIPT
18. Shot of lever	(10 sec. Advance to Frame 18) Also located on the front of the apron is the half-nut lever. On the Maximat lathe it is used either to engage automatic feed or to cut threads.
19. Shot of table	(7 sec. Advance the Film) The Maximat cross slide table is a platform which provides motion for a tool to be fed across the end of the workpiece.
20. Show T-slot	(6 sec. Advance to Frame 20) The cross slide table has three T-slots for mounting the compound rest or other fixtures.
21. Show wrench tightening bolts	(12 sec. Advance) The compound rest is clamped to the cross slide table with two locking bolts. The compound rest may be swiveled and set at any desired angle before tightening the bolts.

FILM	SCRIPT
22. Scale with pointer	(6 sec. Advance to Frame 22) A graduated scale is machined in the base of the compound rest marking every 2° of angle.
23. Picture single tool holder	(4 sec. Advance the Film) The top of the compound rest can hold a single tool holder -
24. Show 4 tool turret	(4 sec. Advance to Frame 24) The compound rest can also hold a 4-tool turret.
25. Shot cleaning machine with rag and oil	(8 sec. Advance the Filmstrip) The lathe is a highly precise machine tool. Its performance depends upon your care in its use and maintenance.
26. Rag on ways	(13 sec. Advance to Frame 26) Get acquainted with the lathe by first cleaning all machined surfaces with an oily rag. Never leave the lathe without this thin film of protective oil over all parts that might rust.

FILM	SCRIPT
27. Oil can dropping oil	(4 sec. Advance) Move the carriage and tailstock as far left as possible and place a drop or two of lubricating oil on the surface of the ways.
28. Tail Stock and Carriage	(Advance to 28) Next move the carriage and tail stock to the extreme right of the bed.
29. Oil can dropping oil	(Advance) Repeat the oiling of the ways.
30. Cross slide backed off	(8 sec. Advance to Frame 30) Back off the cross slide table by turning the handcrank counter-clockwise and apply a few drops of oil to the slides.
31. Compound backed off	(4 sec. Advance the Film) Back off the compound rest and apply a few drops of oil to its slides. It is important that you know how to keep the lathe surfaces clean and oiled and that you know the names of its parts.

FILM	SCRIPT
32. Goggles	(Advance to Frame 32) It is extremely important that you use eye protection when using the lathe. You may elect to wear a pair of safety goggles like these.
33. Face shield at machine	(Advance the filmstrip) You will also note that a face shield is provided for you at the machine. You may elect to wear this instead of goggles. In either case keep the eye protection clean and handle them with care to avoid scratching them. Always wear eye protection when running the lathe.
34. The End: Ask your instructor to check what you have learned	(Advance to the last frame) This is the end of the program. Ask your instructor to check what you have learned. Also, place the tape and filmstrip in their proper locations in the base cabinet.

ACCESSION NUMBER: VT102360

PUBLICATION DATE: JUN74

TITLE: SUPERVISED INDEPENDENT STUDY PROGRAM. ANNUAL REPORT 1973-74.

DESCRIPTOR: *INDEPENDENT STUDY; *CORRESPONDENCE COURSES; *VOCATIONAL EDUCATION; *DROPOUTS; *PROGRAM DESCRIPTIONS; PRISONERS; SOCIALLY DISADVANTAGED

IDENTIFIER: BUCKS COUNTY; PENNSYLVANIA

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 14P.

ABSTRACT: THIS ANNUAL REPORT DESCRIBES THE THIRD YEAR ACTIVITIES FOR FISCAL YEAR 1973-74 OF A PROJECT DESIGNED TO PROVIDE EDUCATIONAL OPPORTUNITIES TO THE DISADVANTAGED, UNEMPLOYED, AND UNDEREMPLOYED OF BUCKS COUNTY, PENNSYLVANIA. THE PURPOSE OF THE PROGRAM WAS TO PROVIDE DROPOUTS WITH OPPORTUNITIES TO FULFILL GRADUATION REQUIREMENTS THROUGH VOCATIONAL CORRESPONDENCE COURSES. THROUGH THE PROGRAM, WHICH INCLUDED TESTING AND VOCATIONAL COUNSELING, STUDENTS ACQUIRED VOCATIONAL SKILLS, OBTAINED EMPLOYMENT, AND GAINED ENTRANCE TO VOCATIONAL SCHOOLS AND COLLEGES. IT HAS ALSO HELPED THE SOCIALLY DISADVANTAGED, INCLUDING THE INMATES IN THE BUCKS COUNTY CORRECTIONAL SYSTEM. A NUMERICAL INDICATION OF COMPLETION RATE TOGETHER WITH AN EXPLANATION OF THE PROGRAM IS PROVIDED IN THE REPORT. (NJ)

INSTITUTION NAME: BUCKS COUNTY PUBLIC SCHOOLS, DOYLESTOWN, PA.

SPONSORING AGENCY NAME: PENNSYLVANIA RESEARCH COORDINATING UNIT FOR VOCATIONAL EDUCATION, HARRISBURG.

VT 102360

BUCKS COUNTY PUBLIC SCHOOLS INTERMEDIATE UNIT NO. 22 DOYLESTOWN, PENNA.

1974

SUPERVISED INDEPENDENT STUDY PROGRAM

ANNUAL REPORT

(Project No. 20-3007)

Dr. H. James Ross
Mr. Daniel H. Evans

Prepared For:
PENNSYLVANIA DEPARTMENT OF
BUREAU OF VOCATIONAL EDUCA
RESEARCH COORDINATING UNIT

VT 102 360

2

BUCKS COUNTY PUBLIC SCHOOLS

INTERMEDIATE UNIT NO. 22
DOYLESTOWN, PENNSYLVANIA

SUPERVISED INDEPENDENT STUDY PROGRAM

ANNUAL REPORT

July through June

FY 73-74

Prepared For:
PENNSYLVANIA DEPARTMENT OF EDUCATION
BUREAU OF VOCATIONAL EDUCATION
RESEARCH COORDINATING UNIT

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PREFACE

The purpose of this Annual Report is to provide the sponsoring Bureau of the Supervised Independent Study Program, the Intermediate Unit Board and secondary school staffs with a comprehensive description of Program activities for FY 73/74. It has been prepared in accordance with requirements set forth by the Pennsylvania Department of Education.

INTRODUCTION

The Supervised Independent Study Program has completed its third year. There has been a steady demand for testing, counseling and vocational and academic training. This demand has been generated by secondary school staffs, social agency referrals and by students who have been helped by the Program.

The Program has been of direct benefit to the dropout, the unemployed and the underemployed. It has also helped the socially disadvantaged which includes inmates in the Bucks County correctional system. The students have gained vocational skills through the numerous correspondence courses offered. They have obtained employment and entrance into vocational schools and colleges.

Since the scope of the Program includes educational opportunities for the disadvantaged, underemployed and unemployed, and since these people are often identified by other social services, there has been a continuing effort to maintain close liaison with these organizations. This has resulted in a significant number of referrals and the attendant ability to directly aid the less fortunate. By acting in concert with the existing social organizations, the referral is more effectively helped and redundancy or overlapping functions are reduced or eliminated.

There has been a constant search for ways to motivate dropouts toward completing vocational correspondence courses. Personal visits, phone calls and letters have been used with a certain degree of success. A numerical indication of completion rate together with an explanation

of the Program is provided in the Findings And Analysis section following.

The follow-up report listing individual students and their status in the Program has not been included as in the past in order to preserve student confidentiality. A feedback report to individual staffs will be prepared in the near future.

STAFF

PROJECT DIRECTOR

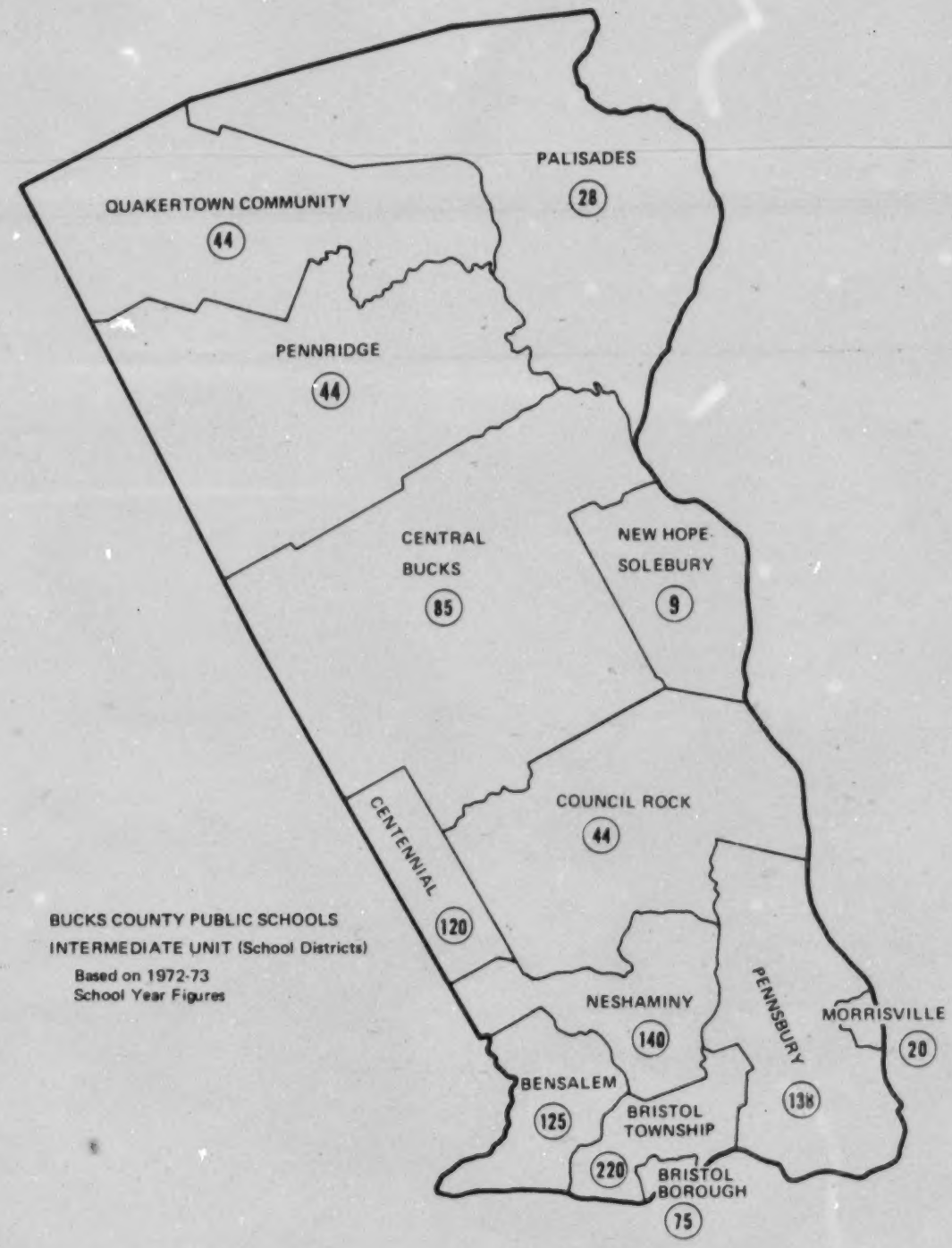
Mr. Daniel H. Evans is a retired Commander, USN. As a Naval Aviator he has seen duty throughout the world. His academic credits include Bucknell University, the United States Naval Academy (graduated in 1951), George Washington University, (MA), the Armed Forces Staff College and Rutgers University. Teaching duties have included the United States Naval Academy, George Washington and Penn State Universities and service schools. He is a management consultant with a firm in the local area.

FULL TIME COUNSELOR

Mr. Frank Smith has served as a counselor in the Lower Bucks County office. He served with the United States Army in Vietnam before joining the Program. A graduate of Salem College majoring in psychology he has been furthering his education by taking course work at Trenton State College.

PART TIME COUNSELOR

Mr. Thomas Baldwin is now teaching English at Council Rock Intermediate School. His academic background has been centered at Kent State University where he received his BS and has done graduate work toward a degree in School Psychology. His summer work with students who have failed English and his experimental classes for non-graded students have helped prepare him for this Program. He has completed his Masters' work at Lehigh University and will soon embark on a Doctoral course at that institution.



Map of Bucks County Showing Dropout Distribution

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FINDINGS AND ANALYSIS

It has been found that in spite of the excellent County school system and its dedicated staffs and the plethora of social agencies extant, there remains a significant segment of the population which needs the services offered by the Supervised Independent Study Program.

As now constituted, the system is unable to satisfy the needs of this numerically significant segment of our population. For those adults who left the system prematurely in the past, an unfulfilled need for counseling and testing is also present.

This need will continue to exist despite the rapidly growing infusion of alternative methods for fulfilling vocational and academic requirements for graduation from high school. The growth of these alternative methods has been very noticeable during the period of Program existence.

The exact degree to which the Program has provided stimulus and leadership in developing these methods within the County School system is not known, however verbal and written feedback from secondary school staffs reveals that the precedents set on the Program have encouraged a liberalization of the formerly restrictive requirements for graduation.

Another interesting aspect of the Program has been the strong growth in the number of referrals of men and women lacking a High School Diploma who have realized the impact of that lack on their working lives.

Many of these referrals are made from other County Social Agencies who often lack specific information concerning the availability of voc-

ational and academic training within the school system.

A vital aspect of the Program has been the unique application of vocational correspondence courses for increasing the dropouts' chances for employment.

It has been found that correspondence work will not produce a master mechanic, plumber etc., but can be an effective tool in raising a person's vocational skill level to a degree which will markedly increase his chances for employment. Private industry spends untold numbers of dollars in the most basic and essential training of new employees, therefore they are generally very receptive toward employing anyone who does not add to this overhead cost.

It must be said however, that great care must be used in selecting those people who would benefit most from vocational correspondence work. Intensive counseling for motivation coupled with selective vocational and academic testing will have a positive effect on completion rates. A numerical proof of this will be found in the Comparative Statistical Analysis section following.

FY 72/73/74 COMPARATIVE STATISTICAL ANALYSIS

	72	73	74
1. Number of full time counselors:	2	2	2
2. Number of part time counselors:	4	2	1
3. Number of Bucks County dropouts, FY 72 & 73	950	1092	
Anticipated number dropouts FY 74			1126
4. Total number of individuals contacted:	1114	1377	1027
5. Total number of contacts made:	2415	4133	4117
6. Total number enrolled in ICS courses:	151	179	64
a. Completed units	262	405	229
b. Completion rate	28%	37%	59%
7. Total number tested: Kuder Interest Inventories and Wide Range Achievement	341	359	572
8. Total number remaining in school through Program efforts	53	57	47
9. Total number who have taken GED test:	54	68	71
10. Total number passing GED test:	48	62	66

ANALYSIS OF STATISTICAL INFORMATION

1. Number of full time counselors - Self explanatory.

2. Number of part time counselors - Reduction in funding caused loss of one part time counselor.

3. County dropout numbers - Self explanatory.

4. Total number of individuals contacted - Total of school and social agency referrals and independent contacts.

5. Total number of contacts made - Total number of times individuals listed in category 4 above were counseled or tested.

6. Total number enrolled in ICS courses - Lower number due to significant cut in Program tuition funding.
   a. Completed units - units in which satisfactory grades were achieved.
   b. Completion rate - obtained by dividing total numbers of units contained in the 64 ICS courses into the number of completed units.

7. Total number tested - Tests are used as counseling tools for ascertaining how to best serve the vocational and academic needs of the individual. Examples of this counseling might be the recommendation to remain in school, take vocational correspondence courses of technical schooling, and/or prepare for the General Equivalency Diploma test.

8. Total number remaining in school through Program efforts - Close coordination with school counselors with follow on on-sight counseling has resulted in alternative methods of satisfying graduation requirements while pursuing gainful employment.

9. Number who have taken GED test - Self explanatory.

10. Number passing GED test - Self explanatory.

CONCLUSIONS AND RECOMMENDATIONS

A distillation of three years of operating experience with the Supervised Independent Study Program in Bucks County leads to the following conclusions and recommendations.

In spite of excellent school facilities and staffs, students will, for a variety of reasons known to professional educators, continue to leave or dropout of the formal system in the foreseeable future.

Therefore it is recommended that there be established within the Intermediate Unit regions, Centers which would provide vocational and academic testing, correspondence courses, counseling and academic and vocational omnbudsman services which have been found to be in such demand by citizens of the County. These Centers should be staffed by life-experienced, empathetically oriented counselors who can guide the educationally disadvantaged citizen to an academic and/or vocational career "ladder" which will enable him to fulfill the role of a productive citizen.

The counselors should have a thorough knowledge of existing social agencies and their functions, be aware of local academic and vocational offerings in the secondary schools and in the commercial field, understand the General Equivalency Diploma (GED) system with its attendant advantages and disadvantages, and provide appropriate testing to more effectively marry the referral to his specific career "ladder".

The Centers should be under the authority of the individual Intermediate Units, responsible to them, and work in a close supportive relationship with the total vocational, academic and business community and interact in concert with existing social agencies.

BUCKS COUNTY PUBLIC SCHOOLS

Intermediate Unit No. 22

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BUCKS COUNTY PUBLIC SCHOOLS
Intermediate Unit No. 22
Ansley Building
Doylestown, Pennsylvania 18901

ACCESSION NUMBER: VT102362

PUBLICATION DATE: 30JUN74

TITLE: THE USE OF INFRA-SOUND THERAPY WITH DEAF AND HARD-OF-HEARING ADULTS. ANNUAL PROGRESS REPORT 1973-1974.

PERSONAL AUTHOR: FRICKE, JAMES; JOHNSON, HELEN

DESCRIPTOR: *HEARING THERAPY; *SPEECH HANDICAPPED; *AURALLY HANDICAPPED; *SPEECH THERAPY; AUDIOMETRIC TESTS; ADULT PROGRAMS; *EQUIPMENT EVALUATION; REHABILITATION

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 112P.

ABSTRACT: THIS PROJECT WAS DESIGNED TO ASSESS THE EFFICACY OF THE TECHNIQUES AND EQUIPMENT DEVELOPED BY INFRA-CODE, INC. FOR REHABILITATION OF DEAF AND HARD-OF-HEARING PERSONS. SPECIFICALLY, THE PROJECT AIMED TO IMPROVE THE COMMUNICATION SKILLS OF THE ADULT PARTICIPANTS TO DETERMINE WHETHER UPWARD MOBILITY CAN BE REALIZED THROUGH THERAPEUTIC INTERVENTION OF THIS TYPE. UPON ENTRY INTO THE PROGRAM, EACH PERSON WAS GIVEN A BATTERY OF AUDIOMETRIC TESTS. IN ADDITION, INFORMATION CONCERNING SOCIAL STATUS GOALS AND VOCATIONAL ASPIRATIONS WAS TAKEN. TREATMENT INVOLVED USE OF AN ELECTRONIC INSTRUMENT WHICH TRANSFORMED THE SPOKEN WORD INTO AN ACOUSTIC MUTANT WHICH HAD HIGH INTELLIGIBILITY VALUE FOR SEVERELY HARD-OF-HEARING AND DEAF PERSONS. SUBJECT RE-TEST WAS DONE AFTER 24 THERAPY SESSIONS. ALTHOUGH NOT ENOUGH OF THE PATIENTS HAVE BEEN RETESTED TO ALLOW FOR STATISTICAL ANALYSIS, THE CLINICAL IMPRESSIONS OF THE PROJECT STAFF INDICATE SPEECH IMPROVEMENT IN THE SUBJECTS. APPENDIXES CONTAIN PROJECT CORRESPONDENCE, SAMPLE TESTING INSTRUMENTS, AND PATIENT EVALUATION DATA. (AUTHOR/NJ)

INSTITUTION NAME: LANCASTER CLEFT PALATE CLINIC, PA.

SPONSORING AGENCY NAME: PENNSYLVANIA RESEARCH COORDINATING UNIT FOR VOCATIONAL EDUCATION, HARRISBURG.

VT 102 362

THE USE OF INFRA-SOUND THERAPY WITH DEAF AND HARD-OF-HEARING ADULTS

Dr. James Fricke
Mrs. Helen Johnson

Annual

Progress Report

Project No. 19-3008

July 1, 1973 - June 30, 1974

Submitted to:
Pennsylvania Department of Education
Bureau of Vocational Education
Research Coordinating Unit

Lancaster Cleft Palate Clinic

Lancaster, PA

THE USE OF INFRA-SOUND THERAPY WITH DEAF AND HARD-OF-HEARING ADULTS

Lancaster Cleft Palate Clinic

Lancaster, PA

VT 102362

NARRATIVE SECTION

This project was designed to assess the efficacy of the techniques and equipment developed by Infra-Code, Inc. for rehabilitation of deaf and hard-of-hearing persons. Specifically, the project aimed to improve the communication skills of the adult participants to determine whether upward vocational mobility can be realized through therapeutic intervention of this type.

The project was begun in 1972 under the auspicies of the Adult Enrichment Center of the Lancaster School District, PDE Project Number 14-2106. That agency chose not to continue the project after the first year; instead the continuation was placed under the aegis of the Lancaster Cleft Palate Clinic through PDE Project Number 19-3008. That change was brought about mostly as a result of administrative factors, however, the new site offered a number of advantages over the previous location of the project: a true clinical environment; additional equipment and materials which aid in the evaluation process of the participants; more adequate parking facilities for patients; and a closer proximity with the audiometric testing facility.

The theoretical background for this project comes from a relatively recent innovation for the education and habilitation of deaf and hard-of-hearing persons developed in Yugoslavia by Dr. Petar Guberina, world renowned phonetician. Guberina developed an interest in the problems of the communication of deaf and hard-of-hearing persons as a result of his earlier work with students in attempting to teach them a foreign language. He discovered in these students an apparent inability to actually hear some of the specific phonetic elements of the language to be learned. To Dr. Guberina, this inability appeared to be a kind of "deafness," resulting from too little conditioning or stimulation of the brain by these new sound elements.

Guberina postulated that the limited acoustic information which is transmitted by a defective hearing mechanism, is similar to the problems he encountered with his students learning a new language. That is, the defective hearing mechanism either distorts the acoustic signal beyond the brain's capacity to properly decode this signal, or else the auditory signals do not reach the cortex at all. In the hearing handicapped person, with speech sounds thus blocked, the normal linguistic growth (both receptive and expressive) is severely constrained.

The defective human ear generally has a deficiency in

transmitting signals in the frequency range from 500 to 4000 HZ. This frequency range is where the maximum amount of acoustic information is transmitted. Guberina suggested that it might be possible to train a person with a defective hearing mechanism to utilize whatever residual hearing he might have for the purpose of decoding auditory information that is transmitted through the defective ear.

To this end Guberina developed a sophisticated electronic instrument (SUVAG) which had the capabilities of:

a. controlling the extent of the frequency parameter of the sound spectrum that is transmitted;

b. producing acoustic envelopes with desired gradients or slopes; and

c. creating either a continuous or discontinuous system for both frequencies and intensities.

This instrument, he demonstrated, had the ability to transform the spoken word into an acoustic mutant which had high intelligibility value for severely hard-of-hearing and deaf persons.

Infra Code, Inc., a California-based company, adapted the electronic properties of SUVAG into a smaller, more manageable machine and proposed a training program to be used for the rehabilitation of deaf and hard-of-hearing persons. This project utilized that instrument and tested the training

procedures developed by that company. Unfortunately, it became obvious during the course of the year that Infra Code, Inc. was not able to provide service in a manner satisfactory to the user. This problem was seen in their slow response, or complete failure of response, to our requests for equipment maintenance; and in their unwillingness to provide training assistance of any substantial nature. Also, the Internal Revenue Service contacted the Clinic and placed a lein on the equipment, indicating that all further rental payments should go to the IRS for payment of back taxes. This matter is, at this date, still unresolved, but constitutes a major administrative problem for the Clinic and has also necessitated unbudgeted legal expenses.

For these reasons the Clinic contacted the Pennsylvania Department of Education toward the end of the fiscal year and recommend purchase of the SUVAG II from the French manufacturer with unexpended funds in the grant award. This recommendation was approved by the PDE and the project is now using this new equipment. Copies of the Clinic's correspondence with Infra Code, Inc., and with the IRS are included in Appendix A.

At the outset of the program it was necessary to inform the interested public about the Clinic's role in rehabilitation of the deaf and hard-of-hearing. This was done through personal contacts with professionals in the area who deal with the deaf

and hard-of-hearing, and also through articles in local newspapers, see pages 6-11. Each newspaper story resulted in several inquiries from interested persons.

PROCEDURES

Patient Pre-Test, Post-Test

Upon entry into the program each patient was interviewed for information contained in the Social Work Inventory (see Appendix B, part 3). This information was an attempt to ascertain the individual's current and long-range goals in regard to things such as social status and vocational aspirations. An attempt was also made to talk with relatives and friends of the patients as a way of further ascertaining his needs and goals. Experience with this Social Work Inventory revealed certain inadequacies which, it was felt, negated the significance of these data. Many of the persons participating in this project had deficiencies in language of a degree which made many of the questions impossible to communicate. Also, some of the participants were either at, or near retirement, and hence the idea of upward vocational mobility was moot.

Each person was given a complete battery of audiometric tests at the time of entry into the program. This was done for two reasons: first of all, it is necessary for the

Lancaster Sunday News, June, 1973

Deaf Study Shows Teacher Key To Learning

Seven months of intensive speech and hearing therapy employing a network of electronic "aids" has been termed very disappointing in terms of gadgetry value but highly successful on the human plane.

The contrast of conclusion is stated in the research report on the Adult Enrichment Center's Research Project for Deaf and Hard of Hearing Adults which was conducted here from Nov. 13, 1972 through May 18, 1973. During that period, 17 Lancaster, Lebanon and York County students ranging in age from 16 to 90 years received a total of 420 hours of intensive speech and hearing therapy from therapist-clinician Ms. Charlotte Hoerner employing methods prescribed by the manufacturers of the Infra-Code equipment.

The Infra-Code equipment consists essentially of four primary parts: a powerful amplifier, a microphone through which the therapist's voice is transmitted into headphones worn by the student, and a vibrator, usually hand-held by the student, which reportedly (activates) sensors in the skin in an attempt to establish a responsiveness to sound patterns normally activated only through the auditory aural canal.

SPENT $20,000

Each of the students were volunteers who participated in the program under a federal grant from the National Science Foundation and administered through the State Department of Education. While $35,947 was budgeted for research and demonstration under this program, "We only spent about $20,000," according to Eugene Madeira, director of the Lancaster City School District's Adult Enrichment Center through which the program was conducted locally.

The disparity in figures, he explained was due to the fact that "we rejected the use of video-taping therapy sessions at the patients' request and used only sound recordings instead."

The recordings have become a bone of contention, reportedly leading professional judges to conclude that no conclusions can be drawn from the speech reception threshold scores or discrimination scores.

"Standard speech audiometry was not an appropriate measure for asserting the speech reception threshold or the discrimination of speech phonemes for these patients," Madeira stated in his summation.

Nevertheless, on the basis of first hand evaluation by Ms. Hoerner and in consideration of patient self-evaluation at the conclusion of the program, Madeira and Ms. Hoerner joined in declaring that the therapy sessions "resulted in definite improvement in speech and use of sentences, pronunciation of words, and even in social improvement."

TEACHER GAINED

In brief, Madeira said, "It boils down to this. It was the teacher, not the machine which made headway. Based on the comments made by students and parents on the evaluative questionaires, audiometric reports and observations, it would appear that the Infra-Code machine served as a type of auditory training device whereby students attempted to interpret and utilize sounds which they had not been 'aware' of before.

"I feel the machine is like any other teaching device," Madeira said. "It isn't the device itself which matters so much but the relationship which exists between the teacher and student."

Madeira explained that, for the most part, persons participating in the local program "were highly motivated and grateful for the one-to-one relationship with the teacher, Ms. Hoerner. To a deaf person, being recognized as a real, important individual and not a defective product and communicating with someone in a significant personal way are rare experiences. "Like other minority groups," he said, "hearing-impaired people have been segregated, discriminated against and neglected. Each has suffered in his own way. We are proud to say that our program this year not only gave auditory and speech therapy but also was able to help in meeting other concrete needs for many of our students."

Lancaster Sunday News, June, 1973, continued

Madeira backed his declaration by noting that three students were specially tutored in reading, another was tutored in English and other high school subjects. Two received assistance from the Bureau of Vocational Rehabilitation and jobs were found for six others.

During the course of the research program, the stimulus material was presented in as many ways as possible, manually and visually, namely by means of lip-reading, by pictures or writing, in an effort to improve every level of communication.

Judges whose evaluations were restricted to examinations of comparative tapes, were unanimous in declaring that, on the basis of pure tone hearing thresholds obtained by standard audiometric procedures, "therapy during the Infra-Code study did not appear to alter the thresholds obtained prior to the therapy sessions."

On the matter of speech, judges reported, "Data analyzed does not indicate a significant change in pre and post tests. The frequency of scores from the pre-test and post-test are, practically speaking, identical." In making this statement, they criticized the manner in which test data had been collected "but we were doing what had been prescribed by the manufacturer of the equipment and according to the parallel demands of the research project outline," Madeira and Mr. Hoerner stated.

Citing the students' own declarations of noticed improvements in speech and noting supportive statements from close relatives and observers not connected with the project, Madeira insisted, "Looking back, I believe that the tremendous gains registered in the project with the students participating must be credited to the teacher who loved and cared and gave of herself to students who had been overlooked before in the educational process. The benefits of the program could have been obtained without the machinery. Therefore," he concluded, "as always, the teacher is the key to the progress of the disadvantaged whether poor, black, Puerto Rican, deaf or blind. The greatest amount of learning takes place only when you have a good teacher."

Millersville State College, The Snapper, August 13, 1973

Hearing Students Learn Sign Language

Thirteen students with perfect hearing have spent much of two weeks this summer learning the sign language for the deaf.

The students were enrolled in a three-week workshop "Communication for the Deaf and Acoustically Handicapped" which was offered for the first time.

Several deaf persons visited the class to give the students experience in communicating with individuals with hearing difficulties.

Teaching the new course was the Rev. Elvin Stoltzfus, a Mennonite minister who conducts services for both the hearing and the deaf. Mr. Stoltzfus, an adjunct member of the faculty for the summer, conducts the Lampeter-Strasburg School for the Deaf and has worked in several other educational programs for the deaf.

The program was offered by the Department of Special Education. Dr. Richard Kettering, department chairman, said the course is an important addition to his curriculum and will be offered again next summer. Enrollment will be increased to between 20 and 25 students.

Rev. Stoltzfus described the course as an overview of communication with the deaf which includes some educational philosophy, lip reading, oral communication skills and manual communication skills.

The emphasis is on manual skills with the course covering 800 words, ideas or concepts in sign language, he said.

"While we cannot expect proficiency in 800 words in three weeks, this exposure does give a basic introduction to commonly used words and enables a teacher to begin communication with the deaf," he added.

Those enrolled in the course included elementary teachers, special education teachers, a speech therapist and advanced undergraduates.

GIVING THE HI SIGN?—Helen Johnson and Laura Reed, the only two undergraduates in the sign language class, converse with hand signals.

Helen, who will graduate in December, is saying "picture." Laura, a prospective May graduate, answers with "sign." (All photos by Mark Usciak)

Lancaster Intelligencer Journal, December 18, 1973

Intelligencer Journal Photo

Clinician Helen Johnson demonstrates the use of the painless Infra-Code system that, through regulation of sound frequency and the use of headphones and a hand-held vibrator, can teach the deaf to hear and correct speech impediments.

Lancaster Intelligencer Journal, December 18, 1973, cont.

With Experimental Machine

Cleft Palate Clinic Offers Aid For Hard Of Hearing

By CYNTHIA MILLER
Intell Staff Writer

For the deaf and the hard-of-hearing, the Lancaster Cleft Palate Clinic is offering a lot of hope through an experimental machine that can let them hear.

Persons 16 years and older, who are deaf or hard of hearing, can obtain free speech and hearing therapy through the local clinic and the infra-code system it is offering.

The system, according to James Fricke, who directs the local project as well as serving as assistant professor of the State University of New York at Albany, centers around a machine that can produce the whole range of sound through the use of low frequency transmissions.

TRAINED TO HEAR

"Even people who are deaf retain some element of hearing," explained Fricke, "And it is possible to train people to hear on the low frequency range where they retain this amount of hearing."

What this means for the hard-of-hearing or deaf person is that hearing can be learned through the infra-code system and speech defects and even the inability to speak can be mastered.

"We can train persons to observe all the discreteness of language using this limited spectrum of sound," he continued, noting that the system, which is still experimental, in gaining more widespread use.

The Cleft Palate Clinic, concerned primarily with facial and mouth disorders, got into the business of hearing examinations some years ago when it was noted that persons with cleft palate problems also had more of a hearing loss than other persons.

The infra-code therapy, however, is an offshoot that is open to all persons, not just those with cleft palate problems.

The clinic took over the program, which is funded by the state Department of Education, from the Adult Education program last August.

Since October, once or twice each week, for one-half to one hour, Mrs. Helen Johnson goes through sounds—from low frequency to higher frequencies.

And on the other side, the deaf person sits, head phones connecting him to the infra-code machine, a hand-held vibrator-pulsator pressing on his palm—telling him through a physical sensation also that sounds are being made.

"First we find the level of sound on the machine which is the best hearing level for the person," explained Helen Johnson. "Then we repeat sentences made up of low frequency sounds, gradually adjusting the filtering device on the machine until there is no filter, and the person is hearing the sound exactly as he would without the machine."

This, then, is the learning process of infra-sound.

Speech therapy can also be offered.

OWN SPEECH PROBLEMS

"Persons who are hard-of-hearing develop their own speech problems," added James Fricke. "Often their speech lacks an emotional content, is characterized by high pitch."

Through infra-code, they can hear sound much the way they would with normal hearing, so they can learn to speak normally, thus doing away with a handicap that shouldn't have to accompany their deafness.

"Infra-code shows that you can train persons to detect the uniqueness of each of our sounds without having to amolify them through jumping low frequency sounds," noted Fricke.

Presently, the project is being used by deaf persons only.

The clinic would like to expand this, offering the service to hard-of-hearing persons also.

Times for therapy appointments are flexible, according to clinician Helen Johnson, who added that the program will be running through the Summer and perhaps longer.

Lancaster New Era, December 18, 1973

AT CLEFT PALATE CLINIC

Experimental Machine Offers Hope for Deaf

An experimental machine at the Lancaster Cleft Palate Clinic is offering hope for the deaf and hard-of-hearing.

The machine, which produces the whole range of sound through the use of low frequency transmissions, is part of an infra-code system at the local clinic, under the direction of James Fricke, assistant professor of the State University of New York in Albany.

POSSIBLE TO TRAIN

"Even people who are deaf retain some element of hearing, and it is possible to train people to hear on the low frequency range where they retain this amount of hearing," Fricke said.

Sentences made up of low frequency sounds are repeated at the level best for the individual, then a filtering device on the machine is gradually adjusted until there is no filter at all, and the person is hearing the sound exactly as he would without the machine.

RESULT OF DISCOVERIES

The new infra-sound system at the Cleft Palate Clinic is an offshoot program, a result of discoveries that persons with cleft palate problems also had more of a hearing loss than other persons. And the machine is helping to overcome a handicap which needn't accompany deafness — speech problems.

clinician to have some knowledge of the hearing status of the patient prior to her clinical treatment; and secondly, it is a way of measuring any possible change that might result from this clinical intervention.

The audiometric tests included pure tone air and bone conduction assesments, speech reception thresholds (SRT), and discrimination tests. Additionally, a multiple choice speech discrimination test was used, patterned after the work of Dr. Carl Asp, University of Tennessee. This discrimination test divides stimulus words according to their acoustic composition (high, medium, low), and may be a better measure of the persons' communication abilities than are the traditional discrimination tests. A Word Intelligibility by Picture Identification Test was also given to each subject.

All speech discrimination tests were given free field, both with and without the patient using his hearing aid. The free field stimulus items were presented at a level of 65 dB ANSI. SRT's were determined by standard audiometric testing procedures.

Re-test was done following 24 therapy sessions. The patient was encouraged to schedule sessions on at least a twice-weekly basis, but most chose a once-weekly course. One subject was seen on a three times/week schedule. Hours for the therapy sessions were flexible, depending on the

work schedule and proximity to the Clinic.

Clinician's Training

The clinician for the Project has been Mrs. Helen Johnson. Mrs. Johnson received her Bachelor of Science Degree from Millersville State College, majoring in psychology. She has taken 30 hours in speech pathology and audiology at the undergraduate level, and has had 68 hours of clinical practicuum. Prior to accepting the position as clinician for this project, Mrs. Johnson was research assistant in speech science at the Clinic.

Mrs. Johnson has participated in a number of activities designed to assist her in her role as clinician with this Project. Infra Code Inc. sent their representative, Miss Janet Whitt, to assist Mrs. Johnson with training for working with adults. Miss Whitt has no formal college training that specifically qualifies her for this task, but has had considerable practical experience with that Company in its training activities.

During the first summer of the project year, Mrs. Johnson and clinicians from the Harrisburg Project Happy Talk and from the Pennsylvania State Oral School for the Deaf, Scranton, attended a three-day workshop at the University of Tennessee under the direction of Dr. Carl Asp. Dr. Asp has worked extensively with the techniques and methodologies developed by Dr. Guberina, and was helpful to the clinicians

by explaining both the theoretical and practical facets of this rehabilitative technique. It should be pointed out again that Infra Code's technology and methodologies were a direct result of the original work by Guberina. There are differences, but the similarities are numerous.

Mrs. Johnson has supplemented her formal training with observations at the Happy Talk Project, and at Scranton, and has attended meetings of the Conference of Executives of American Schools for the Deaf (CEASD) in Tucson, and the Alexander Graham Bell Association in Atlanta. At the Atlanta meeting she attended a course on the Use of Residual Hearing.

She was invited to participate in a three-day workshop sponsored by the Pennsylvania State Oral School for the Deaf entitled "Extended Low Frequency Auditory Amplification and the Deaf Child," held in White Haven, Pennsylvania on June 17-19, 1974. Mrs. Johnson has also taken two courses in sign language; one at Millersville State College, the other sponsored by the Lancaster Hearing Conservation Center's Counseling Service for the Deaf.

Other Personnel

Dr. James E. Fricke left the employ of the Clinic during the project year and thereby relinquished his position as Project Director. He did agree to continue with the Project in an advisory role, and has remained a consultant to the present time.

Mr. John Peter, social worker for the Clinic, also terminated his employment. His position has not yet been filled, but the materials suggested by him for evaluation of the Project population are still being used.

Dr. Elca Swigart continues to perform all audiometric testing for the Project. Dr. Swigart has been affiliated with the Clinic since 1968. She assisted with the pre- and post- audiometric evaluations during the first year of the Lancaster Infra Code project.

The Lancaster Cleft Palate Clinic, which has been certified by the State Department of Vocational Rehabilitation as an audiometric testing facility approved for payment under their auspices, has a full complement of audiometric equipment including a sound-treated room. In addition to being able to complete a full battery of audiometric tests, the Clinic facilities are also equipped to do hearing aid evaluations and recommendations.

Therapy Protocol

It is only possible to describe generally the therapy protocol, since the therapeutic process is individualized. Initially, the clinician's task is to determine the filter settings resulting in optimum subject response. This determination comes about as a result of the patient's audiogram, but also by eliciting subjective responses from the subject regarding the input signal.

If the patient has some residual hearing and a minimum language capacity, he is presented with words and sentences and asked which setting "sounds best." A patient without language is instructed to repeat what he "hears" and the optimal frequency response of the amplifier is that setting where the response is most similar to the input.

The severely hard-of-hearing subject is then given several sessions with simple words and sentences which are amplified through his optimal setting and also presented by means of a bone vibrator to the palm of the hand. The volume control is set at a comfortable loudness level for both the vibrator and earphones.

Subjects with affected speech are provided with an opportunity to listen to their own production through the filter settings as a means of altering their defective articulation. The suprasegmental aspects of the speech pattern, e.g. rhythm, intonation, pitch, quality and rate, are taught through example and practice.

Language development for the pre-lingually deaf is emphasized, beginning with the aural language which will be most immediately useful to the subject.

As the subject advances through the therapeutic program the amplification is reduced as a means of making him "reach" for the acoustic clue. The filter settings are then gradually changed toward a direct amplification setting, similar to the free field speech the patient will receive

in a normal conversational situation.

The clinician maintains an anecdotal record of each therapy session, noting her subjective impressions as well as any objective changes that may transpire.

RESULTS AND DISCUSSION

Test Results

As previously stated, subject re-test was done after 24 therapy sessions. Of the seventeen patients seen, not enough have completed a re-test to allow the data to be statistically analyzed. A more thorough analysis will be possible following this year's continuation of the present project. The results of all audiometric tests are included in Appendix C.

It is possible to get some impressions about what is happening by looking at the several subjects who have gone through the re-test battery.

Notice, for example, subject E.S. On the original battery of audiometric tests this subject had no response to the standard SRT, nor the standard speech discrimination test. Following the 24 therapy sessions, her speech reception threshold was 68 dB, and the speech discrimination had risen to 24%. It also appears that the results of the tests done while the patient was wearing her hearing aid were consistently higher.

Subject C.A. gave no responses to any of the original audiometric tests, but following 24 therapy sessions, she had demonstrated 16% correct on the Word Intelligibility by Picture Identification test, and 57% correct on the Asp discrimination test.

While most patients are seen on a once/week basis, it should be pointed out that these two subjects have chosen a different schedule. E.S. is seen twice/week, and for a period of time C.A. was seen three times/week.

At the beginning of their therapy each subject recorded a speech sample. Following 24 therapy sessions a second speech sample was recorded. None of these has been analyzed due to the limited number of patients who have completed this many therapy sessions, but possibly some subjective impressions should be noted.

Subject M.Y. is a 20 year old male who, upon arrival in the program, had a severely restricted verbal output. For example, if he wanted to convey the idea: "I have to leave now because I start work at 7:00." he would have said, "Work. Seven." At this point in time he is doing much more verbalizing, as reported by his parents and neighbors. His articulation is still very much that of a deaf person, but that too appears to be improving.

J.S.'s family is seeing a change in his speech, as is the family of T.G. P.N. appears, also, to be improving in articulation and suprasegmental aspects of speech.

The speech data need to be analyzed, as previously mentioned, but this will not be done until the end of the present project year. It is anticipated that trained speech judges will be employed to judge the before and after samples.

Clinical Impressions - Mrs. Helen Johnson

If there is one overall impression that I have received from the first year's operation, it is that the speech of my patients is improving. This needs to be documented by future study, but to me it is obvious. There is also some indication that language is improving for some of my clients. This, in spite of the fact that I am not trained as a teacher of language. Possibly what is happening is that the subjects are profiting more by the limited acoustic clues than they did previously. Maybe they really are learning to listen!

I have experienced a good deal of frustration during the first year, principally because of the inadequate training to which I was exposed. The three days spent at the University of Tennessee were valuable, and I did learn some things from Miss Whitt of Infra Code. Maybe what I'm looking for is a cook book and there is no such thing around. Regardless, it is in this area that I have my most serious misgivings about the program.

APPENDIX A

Correspondence Between Clinic, Infra Code, Inc.

LANCASTER CLEFT PALATE CLINIC

MEMORANDUM

TO: Dr. James E. Fricke DATE: 9/17/74

FROM: SUBJECT:

Attached herewith are single copies of correspondence to/from Mr. Singley and copies of the last levy and "final demand" served by the I.R.S. Most of Mr. Singley's communication with the Clinic was by telephone, and I can only guess that there might have been a dozen or more calls. Please sort out what you need from the attached for your report.

Our attorney has now paid $900 (net of 3 months rental less credit per Mr. Singley's letter, July 15, 1974) to the Internal Revenue Service.

A. M. Shank

April 8, 1974

Mr. Lynn Ray Singley
Executive Vice President
American Scientific Industries, Int'l.
1020 Prospect
La Jolla, California

Dear Mr. Singley:

With respect to the lease agreement between your firm and the Lancaster Cleft Palate Clinic covering the Model #401 Infra-Code Clinical System and requiring rental payments at $450 per month, as you are aware, the U. S. Internal Revenue Service has served Notice of Levy upon such accrued payables, and dated as received March 20, 1974. Accordingly payment due April 1, 1974 was drawn payable to the Internal Revenue Service and mailed to the local agent, Mr. Carl Walmer, on March 22, 1974. Subsequently, by telephone, you drew to our attention the levy identified the taxpayer as Infra Code Inc. and stated such firm no longer existed and that it had been purchased by American Scientific Ind. The lease agreement lists the supplier of equipment as Infra Code Division, American Scientific Industries at the same address. Therefore we believed the two were one and the same.

In a spirit of cooperation, at your request, and believing the I.R.S. was perhaps in error, we stopped payment at the bank on the one and only check ($450) that had been drawn. During the interim there has been much communication by telephone by your firm and by us in effort to determine to whom payment should be made under the

circumstances. Your latest conversation with me indicates you are working to resolve differences with the I.R.S. and that you would forward to us a letter agreeing to our making payments to the I.R.S. in accord with its interpretation. As of this date no such letter nor any written communication has been received from anyone.

We have no wish nor intent to default in paying the monthly rental obligation. We do not want to become party to any litigation on this matter. We will appreciate receiving a communication from you confirming your telephoned expression to relieve our position.

Sincerely,

A. M. Shank
Administrator

in

APRIL 8, 1974

MR. A. M. SHANK, ADMINISTRATOR
LANCASTER CLEFT PALATE CLINIC
24 NORTH LIME STREET
LANCASTER, PENNSYLVANIA 17602

RE: INFRA-CODE INC. VS INTERNAL REVENUE SERVICE

DEAR MR. SHANK:

THIS LETTER WILL CONFIRM OUR MANY CONVERSATIONS REGARDING THE STATUS OF AMERICAN SCIENTIFIC INDUSTRIES, INTERNATIONAL'S OBLIGATION TOWARD THE LIABILITY OF TAXES FOR INFRA-CODE, INC. IT HAS BEEN DETERMINED BY THE CORPORATION THAT WE WILL OBTAIN A RELEASE IN HAND FROM THE INTERNAL REVENUE SERVICE AT THE TIME WE MAKE FULL PAYMENT OF THIS OUTSTANDING OBLIGATION IN BEHALF OF INFRA-CODE, INC.

IN THE INTERIM, YOU ARE INSTRUCTED TO FOLLOW WHATEVER COURSE YOUR LEGAL COUNSEL DEEMS NECESSARY TO AVERT ANY PROBLEMS WITH THE INTERNAL REVENUE SERVICE. THIS INCLUDES THE PAYMENT OF FUNDS TO THE INTERNAL REVENUE SERVICE THAT ARE DUE AMERICAN SCIENTIFIC INDUSTRIES, INTERNATIONAL.

WE WANT TO ALSO INFORM YOU THAT THE PAYMENT OF THIS LIABILITY OF INFRA-CODE INC., BY AMERICAN SCIENTIFIC INDUSTRIES, INTERNATIONAL WILL BE DONE UNDER THE STRONGEST PROTEST. (THE VALIDITY OF THE CLAIM AND THE SERVICE UPON YOU OF THE LEVY FOR INFRA-CODE, INC., DOES NOT INCLUDE THE CONTRACTUAL OBLIGATION BETWEEN YOURSELF AND AMERICAN SCIENTIFIC INDUSTRIES, INTERNATIONAL.) (EVEN SO, MR. ERCOLE LEONARDO, REVENUE OFFICER FOR THE INTERNAL REVENUE SERVICE, HAS STATED TO ME PERSONALLY THAT HE WOULD TAKE WHATEVER STEPS NECESSARY, IN THE VARIOUS PROJECTS SIMILAR TO YOURS, TO OBTAIN THE FUNDS DUE AND THIS INCLUDED CONFISCATION OF EQUIPMENT.) TO AVERT THESE PROBLEMS AND TO PROTECT THESE PROJECTS FROM DESTRUCTION, AMERICAN SCIENTIFIC INDUSTRIES, INTERNATIONAL, FEELS THAT IT MUST PAY THESE FUNDS UNDER THE STRONGEST PROTEST. AFTER ALL, HUMAN LIVES AND FUTURES ARE OF MORE IMPORTANCE THAN PROVING WHO IS RIGHT!

SINCERELY,

Lynn Ray Singley

LYNN R. SINGLEY
EXECUTIVE VICE-PRESIDENT

LRS/KLB

AMERICAN SCIENTIFIC INDUSTRIES, INTERNATIONAL
1020 PROSPECT, SUITE 404, LA JOLLA, CALIFORNIA 92037

H. K. COOPER INSTITUTE FOR RESEARCH, EDUCATION AND REHABILITATION
OF THE
LANCASTER CLEFT PALATE CLINIC

24 N. LIME STREET LANCASTER, PA. 17602
TELEPHONE: A.C. 717 - 394-3793

H. K. COOPER, SR., D.D.S., Sc.D., DIR. EMER.
J. A. COOPER, D.D.S., DIRECTOR
R. E. LONG, D.D.S., ASS'T. DIRECTOR
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C. WATT, B.A.
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LARYNGECTOMEE REHABILITATION
W. C. HERR

EDUCATION
E. R. MILLARD, B.S. IN ED.

SOCIAL SERVICE
J. P. PETER, M.Div., A.C.S.W., CHIEF

RESIDENTIAL COUNSELING
J. T. FATZINGER, M.DIV.
N. FATZINGER, B.A.

RESEARCH
W. M. KROGMAN, Ph.D., CHIEF
H. CANTEP, M.A.
J. A. COOPER, D.D.S.
R. L. HARDING, D.D.S., M.D.
R. E. LONG, D.D.S.
M. MAZAHERI, D.D.S., M.Sc.
J. A. MEIER, Ph.D.
R. T. MILLARD, M.A.
J. W. MILLER, JR., M.D.
J. P. PETER, M.Div., A.C.S.W.
E. T. SWIGART, Ph.D.

CONSULTANTS
RADIOLOGY
H. M. BERRY, JR., D.D.S., M.Sc.
P. W. EYLER, M.D.
ORAL MEDICINE AND PERIODONTICS
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SPEECH PATHOLOGY
G. M. DILLER, M.Ed.

June 7, 1974

Mr. Lynn Singley
Infra Code, Inc.
American Scientific Industries
1020 Prospect Street
LaJolla, California 92037

Dear Mr. Singley:

This is to confirm our telephone conversation of May 29th at which time we discussed the following points:

1. The Infra Code machine is still not working correctly as reported to you at least eight weeks earlier;

2. The Lancaster Cleft Palate Clinic is not interested in renewing the lease for said machine for another year;

3. You indicated that your representative would be stopping at the Clinic "next week" to pick up the machine and that the Clinic would not need to pay the final month's lease payment.

I assume these points are in agreement with your recollection of that conversation. My reason for writing is that the machine is still at the Clinic, having not yet been picked up by your representative. Please advise what you would like us to do.

Further, this letter is to state for the record our belief that the services provided by Infra Code have been unsatisfactory. For example, we were given oral assurances that your company would assist with the training of Mrs. Johnson, and this has not been realized. On another occasion, we were told that a malfunctioning

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MEMBER OF PENNSYLVANIA HOSPITAL ASSOCIATION
MEMBER OF AMERICAN DENTAL ASSOCIATION

microphone would be replaced by Airmail Special Delivery. That was six weeks ago and has not yet arrived. Additionally, your repeated promises of clarification of the tax lien situation has not resulted in a resolution of that problem.

I trust that you will move with dispatch in regards to the Infra Code unit here at the Clinic.

Sincerely,

James E. Fricke /dk

James E. Fricke, Ph.D.

JEF:dk

cc: Mr. A. M. Shank, Administrator
Lancaster Cleft Palate Clinic

Mr. Clarence Dittenhafer, Jr.
Bureau of Vocational Education
Department of Education
Box 911
Harrisburg, Pennsylvania

July 15, 1974

Mr. A. M. Shank, Administrator
Lancaster Cleft Palate Clinic
24 North Lime Street
Lancaster, Pennsylvania 17602

Re: Internal Revenue Service Levy

Dear Mr. Shank:

Thank you for your letter of June 28, 1974.

It is with regret that I could not answer sooner, which was due to my travels and involvement with the implementation of the Infra Code methodology in several areas of the country. Upon a careful study of your letter, I can readily understand the situation in which the Lancaster Cleft Palate Clinic finds itself.

Let me clarify and restate our position in regard to the Internal Revenue Service's "Notice of Levy" dated April 15, 1974 (copy attached).

The name "Infra Code Division of American Scientific Industries, International was derived from the use of a methodology that was pioneered by Infra Code, Incorporated of Washington, D.C. The levy that was delivered by the Internal Revenue Service named Infra Code, Incorporated. As I have stated before, that corporation has been dissolved and has no connection whatsoever with American Scientific Industries, International. I have personally informed the I.R.S. that if they feel they have justification to levy against American Industries, International, they should do so, but as you are aware, nothing of that nature has ever occurred.

In regard to our letter of April 8, 1974 wherein I stated that, "It has been determined by the Corporation that we will obtain a release in bond from the Internal Revenue Service at the time we make full payment of this outstanding obligation in behalf of Infra Code, Inc." Since the date of that letter our legal counsel and the corporation has researched the matter totally and found that American Scientific Industries has no such responsibility. And so you are to disregard the instructions contained in that letter.

Mr. Shank; I believe if you will submit this letter to your counsel, he will agree with our attorneys that a Notice of Levy from the I.R.S. is valid only for the day of service and only upon funds due the company named per Sec. 6331, para. (b). (see the reverse side of attached copy of Levy). Therefore, would you please forward your check in the amount that I will specify below so that we may conclude the matter of your Lease Agreement with American Scientific Industries, International. The American Scientific Industries equipment which is in your possession will be picked up by a representative of our company, prior to the end of August this year.

AMERICAN SCIENTIFIC INDUSTRIES, INTERNATIONAL
1020 PROSPECT, SUITE 404, LA JOLLA, CALIFORNIA 92037

As we discussed in our previous telephone conversations, American Scientific Industries, International is making an adjustment for the period of time the equipment was inoperative. This adjustment will amount to one month's rental of $450. According to our records, the balance due American Scientific Industries, after the adjustment, is for the months of April and May 1974, in the total amount of $900.

I am disappointed that the project didn't enjoy the great success that American Scientific's other Infra Code projects have had and are enjoying.

Sincerely,

AMERICAN SCIENTIFIC INDUSTRIES, INTERNATIONAL

Lynn Ray Singley

Lynn Ray Singley
Exec. Vice President

LRS:ss
enc.

AMERICAN SCIENTIFIC INDUSTRIES, INTERNATIONAL
1020 PROSPECT, SUITE 404, LA JOLLA, CALIFORNIA 92037

H. K. COOPER INSTITUTE FOR RESEARCH, EDUCATION AND REHABILITATION
OF THE
LANCASTER CLEFT PALATE CLINIC
24 N. LIME STREET LANCASTER, PA. 17602
TELEPHONE: A.C. 717 - 394-3793

July 22, 1974

K. COOPER, SR., D.D.S., Sc.D., DIR. EMER.
A. COOPER, D.D.S., DIRECTOR
E. LONG, D.D.S., ASS'T. DIRECTOR
M. SHANK, ADMINISTRATOR
EDICAL-SURGICAL
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L. A. DOLAN, D.D.S.
SPEECH PATHOLOGY
G. M. DILLER, M.Ed.

Mr. Lynn Ray Singley,
Executive Vice Pres.
American Scientific Ind.
1020 Prospect, Suite 404
La Jolla, California

Subj: I.R.S. Levy

Dear Mr. Singley:

Thank you for your letter of July 15, 1974, and for your firm's credit of $450 (One month rental) as adjustment for period of equipment malfunction.

With reference to the I.R.S. levy, through the Clinic's attorney, we are awaiting appropriate communication as to whom and to what extent we are liable.

Sincerely,

A. H. Shank

A. H. Shank,
Administrator

A HOSPITAL FOR ORAL-FACIAL DEFORMITIES AND COMMUNICATIVE DISORDERS
ACCREDITED BY AMERICAN SPEECH & HEARING ASSOCIATION
MEMBER OF THE AMERICAN HOSPITAL ASSOCIATION
MEMBER OF PENNSYLVANIA HOSPITAL ASSOCIATION
MEMBER OF AMERICAN DENTAL ASSOCIATION

FORM 668-A
(Rev. MAR. 1970)

DEPARTMENT OF THE TREASURY—INTERNAL REVENUE SERVICE

NOTICE OF LEVY

DATE
July 24, 1974

Rec'd Co. Bank 9/13/74

TO
Lancaster Cloft Palata Institute
24 North Lime Street
Lancaster, Pennsylvania 17602

INTERNAL REVENUE SERVICE

ORIGINATING DISTRICT
Baltimore

You are hereby notified that there is now due, owing and unpaid to the United States of America from the taxpayer whose name appears below the sum of → $ 6684.35

TAX FORM NO.	PERIOD ENDED	DATE OF ASSESSMENT	IDENTIFYING NO.	UNPAID BALANCE OF ASSESSMENT	STATUTORY ADDITIONS	TOTAL
941	7209	11-13-72	52-0913578	$3826.99	$1021.55	$4848.54
"	7206	12-18-72	" "	1549.97	286.34	1836.31
				TOTAL AMOUNT DUE		6684.85

You are further notified that demand has been made for the amount set forth herein upon the taxpayer who has neglected or refused to pay, and that such amount is still due, owing, and unpaid from this taxpayer. Accordingly, you are further notified that all property, rights to property, moneys, credits, and bank deposits now in your possession and belonging to this taxpayer (or with respect to which you are obligated) and all sums of money or other obligations owing from you to this taxpayer, or on which there is a lien provided under Chapter 64, Internal Revenue Code of 1954, are hereby levied upon and seized for satisfaction of the aforesaid tax, together with all additions provided by law, and demand is hereby made upon you for the amount necessary to satisfy the liability set forth herein, or for such lesser sum as you may be indebted to him; to be applied as a payment on his tax liability. Checks or money orders should be made payable to "Internal Revenue Service".

SIGNATURE: Albert E. Neil
TITLE: Revenue Officer
ADDRESS (CITY AND STATE): Wheaton, Maryland

Phone area code 301-427-7020

(Name and Address of Taxpayer)

Infra Code, Inc
7316 Wisconsin Avenue
Bethesda, Maryland 20014

CERTIFICATE OF SERVICE

I hereby certify that this levy was served by delivering a copy of this notice of levy to the person named below.

NAME: ALBERT M. SHANK
TITLE: ADMINISTRATOR
DATE AND TIME: 9-13-74 10.40 AM.
SIGNATURE OF REVENUE OFFICER: Carl D. Palmer

PART 2 — TO BE RETAINED BY ADDRESSEE

FORM 668-A (Rev. 3-70)

FORM 668-C
(REV. MAY 1957)

DEPARTMENT OF THE TREASURY - INTERNAL REVENUE SERVICE

FINAL DEMAND

DISTRICT: Baltimore

DATE: July 26, 1974

TO: Lancaster Clazt Palate Institute
24 North Lime Street, Lancaster, Pennsylvania 17602

On September 13, 19 74 there was served upon you a levy, by leaving with Albert M Shank, Administrator at 24 N Lime St, Lancaster, Pa. a notice of levy, on all property, rights to property, moneys, credits and bank deposits then in your possession, to the credit of, belonging to, or owned by Infra Code, Inc of 7315 Wisconsin Avenue Bethesda, Maryland 20014, who was at the time, and still is, indebted to the United States of America for unpaid internal revenue taxes, together with additions provided by law which had accrued thereon at the time of levy, and which amounted at that time to the sum of $ 6684.85. Demand was made upon you for the amount set forth in the notice of levy, or for such lesser sum as you may have been indebted to the taxpayer, which demand has not been met.

Your attention is invited to the provisions of section 6332, Internal Revenue Code, as follows:

SEC. 6332. SURRENDER OF PROPERTY SUBJECT TO LEVY.

(a) Requirement.—Except as otherwise provided in subsection (b), any person in possession of (or obligated with respect to) property or rights to property subject to levy upon which a levy has been made shall, upon demand of the Secretary or his delegate, surrender such property or rights (or discharge such obligation) to the Secretary or his delegate, except such part of the property or rights as is, at the time of such demand, subject to an attachment or execution under any judicial process.

(c) Enforcement of Levy.—

(1) Extent of Personal Liability.—Any person who fails or refuses to surrender any property or rights to property, subject to levy, upon demand by the Secretary or his delegate, shall be liable in his own person and estate to the United States in a sum equal to the value of the property or rights not so surrendered, but not exceeding the amount of taxes for the collection of which such levy has been made, together with costs and interest on such sum at the rate of 6 percent per annum from the date of such levy. Any amount (other than costs) recovered under this paragraph shall be credited against the tax liability for the collection of which such levy was made.

(2) Penalty for Violation.—In addition to the personal liability imposed by paragraph (1), if any person required to surrender property or rights to property fails or refuses to surrender such property or rights to property without reasonable cause, such person shall be liable for a penalty equal to 50 percent of the amount recoverable under paragraph (1). No part of such penalty shall be credited against the tax liability for the collection of which such levy was made.

(d) Effect of Honoring Levy.—Any person in possession of (or obligated with respect to) property or rights to property subject to levy upon which a levy has been made who, upon demand by the Secretary or his delegate, surrenders such property or rights to property (or discharges such obligation) to the Secretary or his delegate (or who pays a liability under subsection (c)(1)) shall be discharged from any obligation or liability to the delinquent taxpayer with respect to such property or rights to property arising from such surrender or payment. In the case of a levy which is satisfied pursuant to subsection (b), such organization shall also be discharged from any obligation or liability to any beneficiary arising from such surrender or payment.

(e) Person Defined.—The term "person," as used in subsection (a), includes an officer or employee of a corporation or a member or employee of a partnership, who as such officer, employee, or member is under a duty to surrender the property or rights to property, or to discharge the obligation.

Demand is again made for the amount set forth in the notice of levy, $ 6684.85, or for such lesser sum as you may have been indebted to the taxpayer at the time the notice of levy was served. If you comply with this final demand within five days from its service, no action will be taken to enforce the provisions of section 6332 of the Internal Revenue Code. If, however, this demand is not complied with within five days from the date of its service, it will be deemed to be finally refused by you and proceedings may be instituted by the United States as authorized by the statute quoted above.

SIGNATURE	TITLE	ADDRESS (City and State)
Alfred E. Wolfe	Revenue Officer	Wheaton, Md 20902

CERTIFICATE OF SERVICE

I hereby certify that this Final Demand was served by handing a copy thereof to:

NAME	TITLE	
PLACE	DATE	TIME
REVENUE OFFICER (Signature)		DATE

FORM 668-C (REV. 5-57)

U. S. GOVERNMENT PRINTING OFFICE: 1957-O-

August 24, 1973

Mr. Louis L. Tompkins
Mr. Lynn Singley
c/o Infra Code Inc.
1020 Prospect Street
Lajolla, California, 92037

Gentlemen:

We received the Infra Code machine from the Pennsylvania State Department of Education. There are certain problems which I want to draw to your attention and trust that you will resolve at your earliest possible convenience.

First of all, I believe certain of the modules are inoperable. Upon activating the white noise (all filters "off") at a level of -12 on its VU meter, the following readings occur as we switch through the eight positions of the "Mode Selector"

Mode Selector	Input VU Meter	dB output Meter
1	+3 (pegged)	37
2	-5	23
3	-7	20
4	-20	10
5	-20	8
6	-20	6
7	-20	1
8	-20	0

According to the sketchy information in the manual, this means the machine is not functioning properly.

Secondly, and possibly coincidental with the first point, it is obvious from listening to the output signal at the headphones that the low filters are not filtering at all. Establishing a peak at 150 cycles and excluding all other signals higher than that should result in an acoustic sensation with which I am very familiar. This is not the case at all. Speech comes through loud and clear.

Thirdly, the machine was sent with only one microphone and the manual spoke of there being two microphones with each unit.

Finally, the signal-to-noise ratio in the unit is very poor. I see absolutely no reason for this since we are dealing with a rather sophisticated electronic instrument. Signal-to-noise ratio problems have been eliminated for at least the last decade.

To this date, we have not yet received a contract from Infra Code regarding the rental on this equipment. We will look forward to receipt of this contract, predicated, of course, on the satisfactory repair of the equipment.

Sincerely,

James E. Fricke, Ph.D.
Project Director

CC: A. M. Shank, Administrator
Clarence Dittenhafer, Pa. State Dept. of Education
JEF:pag

AMERICAN SCIENTIFIC INDUSTRIES, INT'L.
1020 Prospect Suite 404
LaJolla, California 92037

October 9, 1973

Mr. A. M. Shank, Administrator
Lancaster Cleft Palate Institute
24 North Lime Street
Lancaster, Pennsylvania

Dear Mr. Shank:

I certainly enjoyed my visit with you, at the clinic, in September. The clinician, Mrs. Johnson, seems to be an excellent choice and I'm sure she will do very well.

I am enclosing three (3) copies of our lease, with you, for the Infra Code project. If you will execute them and forward them to Dr. Ditenhafer at the Pennsylvania Department of Education, he will sign them and return a fully executed copy to you.

Mr. Louis L. Tompkins, our Secretary-Treasurer, will be in Lancaster on Monday the 15th of October and in Harrisburg on the 16th. I am hopeful that you will be able to get these copies to Dr. Ditenhafer by then.

Thank you for the work you've been doing for mankind. As I told you, the day to day grind doesn't seem a very noble occupation. But, I feel we are helping so many, that perhaps would never receive it, but for your efforts, and the efforts of men like you.

I look forward to visiting with you on my next trip East.

Sincerely,

Lynn Ray Singley

Lynn Ray Singley
Executive Vice President

APPENDIX B

Testing Instruments Used

1. Word lists from the Picture Discrimination Test
2. Word lists from the multiple choice Discrimination Test
3. Social work inventory

WORD INTELLIGIBILITY BY PICTURE IDENTIFICATION

Word Lists

I	II	III	IV
1. school	1. broom	1. moon	1. spoon
2. ball	2. bowl	2. bell	2. bow
3. smoke	3. coat	3. coke	3. goat
4. floor	4. door	4. corn	4. horn
5. fox	5. socks	5. box	5. blocks
6. hat	6. flag	6. bag	6. black
7. pan	7. fan	7. can	7. man
8. bread	8. red	8. thread	8. bed
9. neck	9. desk	9. nest	9. dress
10. stair	10. bear	10. chair	10. pear
11. eye	11. pie	11. fly	11. tie
12. knee	12. tea	12. dirt	12. bee
13. street	13. meat	13. key	13. teeth
14. wing	14. string	14. feet	14. ring
15. mouse	15. clown	15. spring	15. mouth
16. shirt	16. church	16. crown	16. skirt
17. gun	17. thumb	17. sun	17. gum
18. bus	18. rug	18. cup	18. bug
19. train	19. cake	19. snake	19. palm
20. arm	20. barn	20. car	20. star
21. chick	21. stick	21. dish	21. fish
22. crib	22. ship	22. bib	22. lip
23. wheel	23. seal	23. queen	23. green
24. straw	24. dog	24. saw	24. frog
25. pail	25. nail	25. jail	25. tail

DISCRIMINATION (FREQUENCY) LIST

1. new
   blue
   two
   bell

2. love
   mine
   tub
   glove

3. jump
   gum
   map
   bump

4. deep
   brown
   round
   now

5. spoon
   spool
   moon
   view

6. slope
   bed
   slow
   go

7. lung
   song
   girl
   young

8. rock
   chop
   clock
   lunch

9. room
   bye
   flea
   fly

10. wave
    born
    warm
    near

11. play
    place
    grace
    sweet

12. turn
    luck
    truck
    rut

13. bunk
    door
    frost
    front

14. bean
    cream
    clean
    good

15. done
    drill
    five
    drive

16. wake
which
white
zoo

17. bake
part
park
cup

18. eggs
Ed
nose
zip

19. worm
swim
Jim
smile

20. smell
ball
snow
small

21. store
prose
twice
price

22. sing
sink
ring
school

23. wait
state
skate
bay

24. wine
shine
shy
kind

25. snake
wake
snack
walk

26. wreck
read
mud
rest

27. grass
glow
past
great

28. mother
mouth
thank
teeth

29. wake
catch
clock
watch

30. won
nice
knee
mice

As you begin this Hearing Program, we would like to ask you some questions about your past and present experiences. Some of the questions will relate directly to hearing while others will help us understand your general life situation. Together we hope that they will enable us to evaluate the value of the program. Some of the areas we ask about may seem personal, so we want to assure you that they will be kept in confidence.

1 What is your date of birth? _____

2 Are you male or female? ☐ Male ☐ Female

3 What is your marital status? [CHECK THE BOX THAT BEST DESCRIBES YOUR PRESENT SITUATION]

☐ single ☐ married ☐ widowed ☐ separated ☐ divorced ☐ remarried

If you are, or have been married, what was the date of your marriage? _____

If you are remarried what was the date of your first marriage? _____

4 How far did you go in school? [CIRCLE NUMBER OF LAST GRADE YOU COMPLETED]

Grade & High School: 1 2 3 4 5 6 7 8 — 9 10 11 12

College: 1 2 3 4 — 5 6 7 8

If you graduated from college do you have any of the following degrees?

☐ M.A., M.S. ☐ Ph.D.

☐ Professional degree such as in Law, Medicine, etc.

Other education: _____

5 If you could have continued in school, how much further would you have liked to have gone? [CHECK BOX IN FRONT OF YOUR CHOICE]

☐ no further

☐ complete 8th grade

☐ attend 2 or more years of high school

☐ complete high school

☐ high school plus less than two years of some type of additional training

☐ attend college 2 or more years

☐ 4-year college degree

☐ Master's degree

☐ professional school (Medicine, Law, etc.)

☐ Ph.D. level

6 Now thinking about your employment, are you currently employed?

- ☐ employed
- ☐ unemployed

7 If you are currently employed, what is the title of your present job?

_____

8 What do you do in your job? _____

9 What is your employer's business? _____

10 How long have you been working on your present job? _____

11 If you are not employed, what is the title and description of your last job.

_____

12 How well do you like your present job? Would you say that you liked it
[PLEASE CHECK ONE OF THE FOLLOWING]

- ☐ very much
- ☐ moderately well
- ☐ indifferent
- ☐ moderately dislike
- ☐ strongly dislike
- ☐ I am unemployed

13 While you are working on your job, how many people would you say you usually come in contact with during the working day?

- ☐ none
- ☐ one to three
- ☐ four to ten
- ☐ eleven to twenty
- ☐ more than twenty

14 In order to carry out your work, how much conversation with others is necessary?

- ☐ none at all
- ☐ very little
- ☐ less than average
- ☐ average amount
- ☐ a good deal

15 What would you estimate your gross family income to be last year? (This would be the amount on which you paid income taxes)

	Between	And
☐	0	1,999
☐	2,000	3,999
☐	4,000	5,999
☐	6,000	7,999
☐	8,000	9,999
☐	10,000	11,999
☐	12,000	13,999
☐	14,000	15,999
☐	16,000	17,999
☐	18,000	

16 Now regarding the source of income, how much of your family's total income is a result of your employment? [PLEASE INDICATE THE AMOUNT IF ANY]

_____

How much of your family's total income is a result of your spouse's employment? [PLEASE INDICATE THE AMOUNT IF ANY]

_____

17 How many people are supported by your total family income?

Number _____

18 If you could increase your family income, how much more would you like to have?

☐ $10 per week

☐ $10.01—$20 per week

☐ $30.01—$50 per week

☐ $50.01—$100 per week

☐ more than $100 per week

☐ present income is satisfactory

19 Now we would like to ask you how many full time jobs lasting a year or more you have held prior to your present employment? [IF NOT PRESENTLY EMPLOYED, HOW MANY JOBS HAVE YOU PREVIOUSLY HELD?]

Number _____

Please list the job titles of the full time jobs you have had during the past 15 years, (or as long as you have been working if less than 15 years) starting with your present job.

Title of job	Company	No. of years worked at job

20 What is the longest amount of time you have been unemployed during the years you have worked?

- ☐ none, have worked continuously
- ☐ between 1 week and a month
- ☐ more than a month to six months
- ☐ more than six months to one year
- ☐ more than a year to 1½ years
- ☐ more than 1½ years to 2 years
- ☐ more than 2 years to 5 years
- ☐ more than 5 years

21 Regarding your work experience, how stable has your employment been?
[CHECK THE BOX WHICH BEST DESCRIBES YOUR SITUATION]

- ☐ rarely work
- ☐ work when can find job, but irregularly
- ☐ work periodically, when desirable
- ☐ steadily employed but job is seasonal
- ☐ steadily employed but change jobs frequently
- ☐ steadily employed but occasionally am laid off
- ☐ steadily employed; infrequently change jobs
- ☐ steadily employed, have worked continuously
- ☐ does not apply; not employed

22 Thinking about your own present job, how secure do you consider your job to be?

- ☐ very secure
- ☐ quite secure—more secure than insecure
- ☐ rather insecure—more insecure than secure
- ☐ very insecure
- ☐ does not apply; not employed

23 How well do you think your present employment uses and demonstrates your abilities?
[PLEASE CHECK THE FOLLOWING RESPONSE THAT BEST DESCRIBES YOUR THINKING]

- ☐ very well suited to abilities
- ☐ quite well suited to abilities
- ☐ somewhat suited to abilities
- ☐ poorly suited to abilities
- ☐ very poorly suited to abilities
- ☐ does not apply; not employed

24 If you had a choice with regard to your present job, what do you think you would most like to do?

- ☐ stay at your present job at same pay
- ☐ stay at your present job at a higher pay
- ☐ advance to a higher position at present pay
- ☐ take a higher position at higher pay
- ☐ take a lower position at present pay
- ☐ take a similar job with another employer
- ☐ take a different kind of job with another employer
- ☐ other [SPECIFY] _____
- ☐ does not apply; not employed

If you are presently married, please answer the following question.
[IF YOU ARE NOT MARRIED CONTINUE WITH QUESTION #42]

25 Thinking back over your marriage, how often have you been separated for more than a week because of marital difficulties?
(FROM PRESENT SPOUSE)

- ☐ no history of separation
- ☐ once
- ☐ twice
- ☐ more than twice

26 How proud are you of your abilities and accomplishments?

- ☐ no pride in abilities and accomplishments
- ☐ little pride in abilities and accomplishments
- ☐ slight pride in abilities and accomplishments
- ☐ some pride in abilities and accomplishments
- ☐ much pride in abilities and accomplishments
- ☐ very much pride in abilities and accomplishments

Now we would like to ask you about your social contacts and activities

27 Thinking of visits and telephone calls, were you in touch with any relatives during the past two weeks? (NOT COUNTING ANY WHO LIVE WITH YOU)

- ☐ yes
- ☐ no
- ☐ does not apply; no relatives

28 How often do you see or visit those families:

- ☐ at least once a week
- ☐ every two weeks
- ☐ once a month
- ☐ every six months
- ☐ once a year
- ☐ less often than once a year

29 Now, how about friends other than relatives. During the past few weeks how many times did you get together with friends—I mean things like going out together or visiting in each other's homes?

- ☐ not at all
- ☐ once
- ☐ twice
- ☐ three times
- ☐ four times
- ☐ five times or more

30 On the average during the past two weeks, how many times a day did you chat with friends on the telephone?

- ☐ not at all
- ☐ once a week
- ☐ once a day
- ☐ twice a day
- ☐ three or more times a day

31 Do most of your friends know each other?

- ☐ yes
- ☐ some do, some don't
- ☐ no

32 How many of your neighbors do you know?

- ☐ all of them
- ☐ some of them
- ☐ only a few
- ☐ none

33 How often do you visit in the homes of people who live right around your home?

- ☐ very often
- ☐ fairly often
- ☐ just once in a while
- ☐ not at all

If you ever received treatment for your hearing problem, how do you feel about the results?

1. No therapy
2. Very dissatisfied
3. Dissatisfied
4. Less than satisfied
5. Satisfied
6. Very satisfied

How well are satisfied with your present hearing ability?

1. Very dissatisfied
2. Dissatisfied
3. Less than satisfied
4. Satisfied
5. Very satisfied

How satisfied are you with your speech?

1. Very dissati fied. I have very many speech problems
2. Dissatisfied. I have a number of speech problems
3. Somewhat satisfied, my speech problems are minor
4. Satisfied. I hardly notice any speech difficulty
5. Very satisfied. I have no difficulty with speech at all

Do you think your hearing problem had anything to do with how far you went in school?

1. Yes, it definitely kept me from getting more education.
2. Yes, I think my hearing problem did have something to do with my not getting more education.
3. It is possible that if I did not have a hearing problem, I would have gotten further in school.
4. No, I don't think it made much difference.
5. No, it definitely did not make any difference at all.

Do you think your having a hearing problem has ever entered into your being dismissed from a job?

1. Yes, it definitely caused me to lose my job.
2. Yes, I think my having a hearing problem contributed to my losing a job.
3. It is possible that it made a difference.
4. No, I don't think it made much difference.
5. No, my having a hearing problem did not cause me to lose a job.

Have you ever felt that you didn't get hired for a job because of your hearing problem?

1. Definitely yes. I know I wasn't hired on several jobs because of it.
2. Yes. It is much harder for a person with a hearing problem to get a job.
3. I sometimes felt that I had difficulty because I have a hearing problem.
4. Not too much, my hearing problem may have entered into it, but very slightly.
5. No, not at all. My hearing problem would have nothing to do with it.

While engaged in your job, how would you describe the number of people you may have to come in contact with:

1. None
2. Not too many
3. Fairly large number
4. Large number
5. Very large number

In order to carry out your work, how much conversation with others is or was necessary?

1. None at all
2. Hardly any at all
3. Less than average
4. Average amount
5. A good deal

In general, how do you think you get along with the other employees?

1. Very poorly
2. Poorly
3. Satisfactorily
4. Good
5. Very good

In general, how would you rate your teenage life?

1. Extremely unhappy
2. Rather unhappy
3. About average
4. More happy than average
5. Extremely happy

As a teenager in school, how frequently did you participate in extra-curricular activities such as clubs, sports, etc.

1. Never
2. Rarely
3. Less than frequently
4. Frequently
5. Very frequently

During your teens, how many friends did you have about your own age?

1. Very few
2. A few
3. A fair number
4. Many
5. Very many

HOW I FEEL ABOUT MYSELF

On the following pages are listed a number of things about yourself and your body. You are asked to tell us which things you are satisfied with exactly as they are, which things you worry about and would like to change if it were possible, and which things you have no feelings about. We want you to tell us how you feel about each one by writing a number in the blank space before it.

Before each word or phrase, write the number that most closely indicates your true feeling. The meaning of each number is:

1 = I don't like it at all and I wish it could be changed.

2 = I don't like it.

3 = I have no special feelings about it one way or the other.

4 = I am satisfied.

5 = I am completely satisfied and I would not change it if I could.

HOW I FEEL ABOUT MYSELF AND MY BODY

1. ____ appetite
2. ____ speech
3. ____ breathing
4. ____ waist
5. ____ ears
6. ____ chin
7. ____ shape of head
8. ____ talking
9. ____ looks
10. ____ height
11. ____ age
12. ____ eyes
13. ____ digestion
14. ____ hips
15. ____ energy level
16. ____ teeth
17. ____ feet
18. ____ sleeping
19. ____ voice
20. ____ health
21. ____ posture
22. ____ face
23. ____ weight
24. ____ trunk
25. ____ myself

Before each word or phrase, write the number that most closely indicates your true feeling. The meaning of each number is:

1 = I don't like it at all and I wish it could be changed.

2 = I don't like it.

3 = I have no special feelings about it one way or the other.

4 = I am satisfied.

5 = I am completely satisfied and I would not change it if I could.

HOW I FEEL ABOUT MYSELF AND MY BODY

PART ~~II~~

1. _____ my first name
2. _____ how I say things
3. _____ the clothing I wear
4. _____ how I do what I'm supposed to do
5. _____ how I try something new
6. _____ how I understand myself
7. _____ my moods
8. _____ my knowledge
9. _____ my imagination
10. _____ how popular I am
11. _____ my self-confidence
12. _____ my last name
13. _____ my manners
14. _____ my handwriting
15. _____ my intelligence
16. _____ my athletic skills
17. _____ my happiness
18. _____ how I do things
19. _____ how other people like me
20. _____ my conscience
21. _____ my feelings
22. _____ my thoughts
23. _____ my memory
24. _____ my personality
25. _____ my fears
26. _____ how I meet people
27. _____ how I work
28. _____ my neatness
29. _____ my work in school
30. _____ my dreams

APPENDIX C

Patient Evaluation Data

Name CA

Date 10/[illegible] Examiner [illegible]

Standard SRT (unaided) —

Standard Discrimination – 40dB SRT (unaided) —

Word intelligibility (Picture) – 65dB SPL (unaided) —

Spondee list 65dB (unaided) 0

Standard SRT (aided) No Aid

Standard Discrimination – 40dB SRT (aided) No Aid

Word Intelligibility (Picture – 65dB SPL (aided) No Aid

Spondee list 65dB (aided) No Aid

Spondee list 110dB (unaided) 0

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

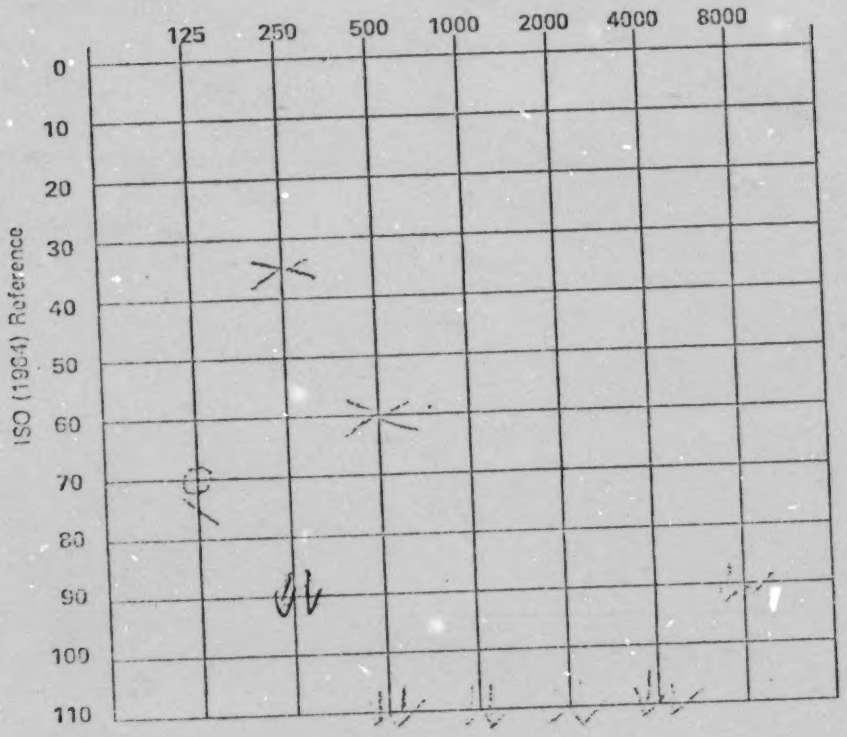
RIC ANALYSIS

Name CA Age 22 Date Oct 10 1973

Address _____ Telephone _____

Referred by Tom Cado Examiner _____

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

AIR MASKED
RE: △ - Red (LE masked _____ dB)
LE: ▽ - Blue (RE masked _____ dB)

BONE
RE: > - Red
LE < - Blue

BONE MASKED
RE: > - Red (LE masked _____ dB)
LE: ◁ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good _____ Ave. _____ Poor _____
TEST RELIABILITY
Good _____ Ave. _____ Poor _____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

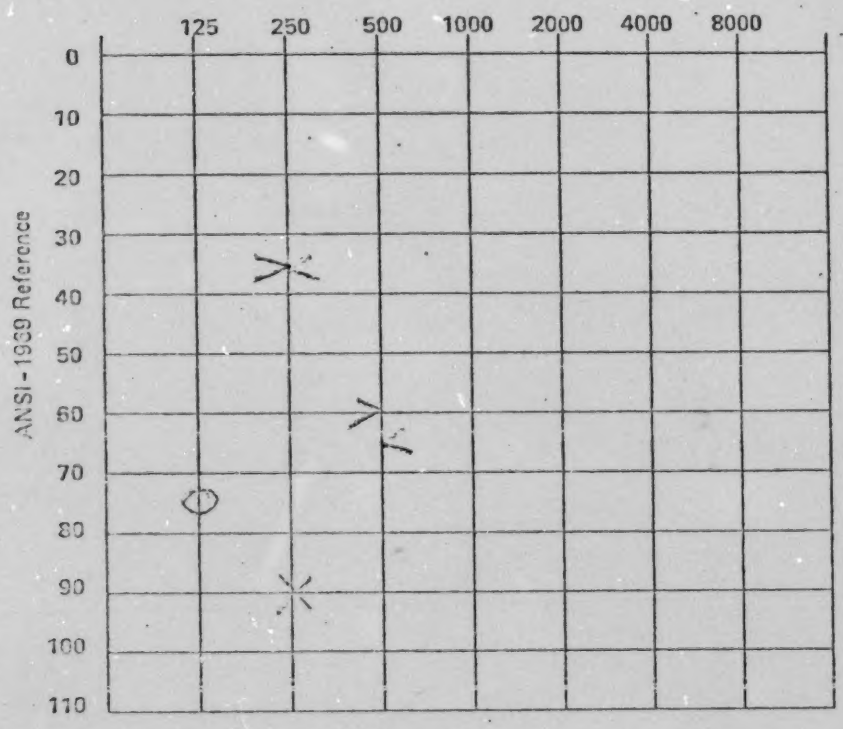
RIC ANALYSIS

Name C A Age 22 Date 5-17-73

Address _____ Telephone _____

Referred by Infirm Cole Examiner ES

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ⊳ - Red (LE masked _____ dB)
LE: ⊲ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good _____ Ave. _____ Poor _____
TEST RELIABILITY
Good _____ Ave. _____ Poor _____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

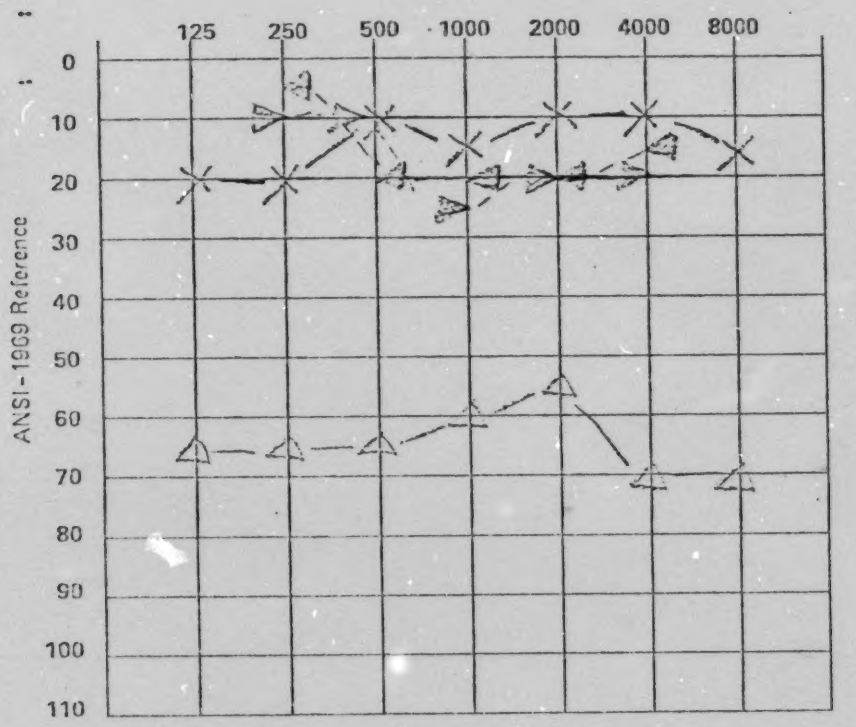
AUDIOMETRIC ANALYSIS

Name F. B. Age 65 Date 6-26-74

Address _____ Telephone _____

Referred by Infra Code Examiner E. Sweyard

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE
RE: > - Red
LE < - Blue

BONE MASKED
RE: > - Red (LE masked 70 dB)
LE: ⊣ - Blue (RE masked 70 dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good _____ Ave. _____ Poor _____
TEST RELIABILITY
Good _____ Ave. _____ Poor _____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:
Patient expressed definite confidentality of test results desired.
Is patient of Dr. John Miller, Lancaster.

Na HB

Age 55 date 3/20/71

Speech therapist's evaluation of ability of patient to be audiometrically examined.

	Yes	No
Say a response	✓	
Write a response (good spelling and good penmanship)	✓	
Choose a response from a list of 25 words	✓	
Choose a response from a multiple choice list of 4 words	✓	
Choose a response from 6 pictures	✓	

HB

Date 3/20/74 Examiner E.S

Standard SRT (unaided) 45 dB

Standard Discrimination - 40dB SRT (unaided) 100%

Word intelligibility (Picture) - 65dB SPL (unaided) 96%

Frequency list (unaided) 100%

Standard SRT (aided) 15 dB

Standard Discrimination - 40dB SRT (aided) 96%

Word Intelligibility (Picture - 65dB SPL (aided) 96%

Frequency list (aided) 97%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

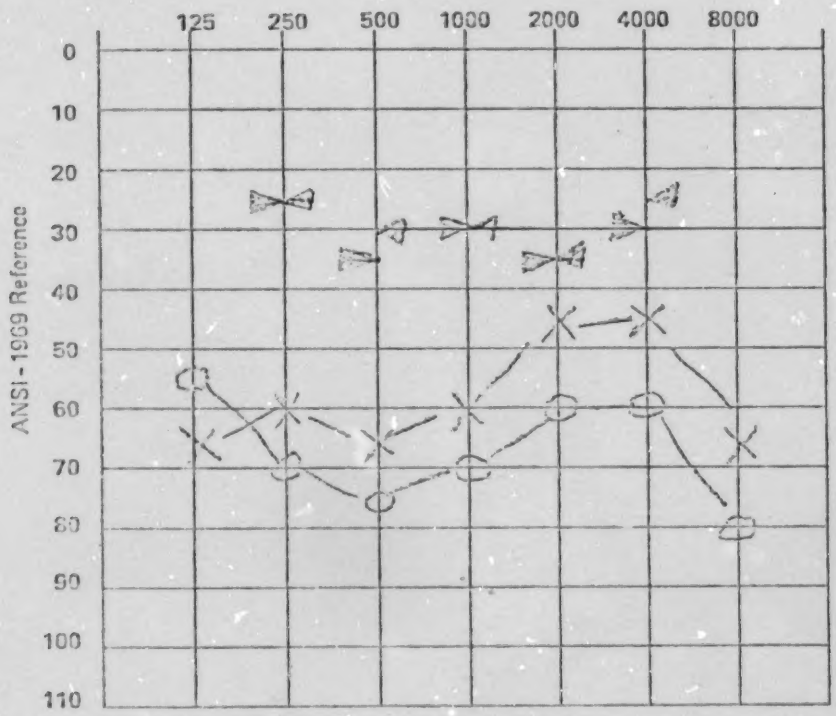
AUDIOMETRIC ANALYSIS

Name H B Age 55 Date 3-20-74

Address _____ Telephone _____

Referred by Infra Cole Examiner E. Swejart

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: > - Red (LE masked 90 dB)
LE: ◄ - Blue (RE masked 40 dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good ____ Ave. ____ Poor ____
TEST RELIABILITY
Good ____ Ave. ____ Poor ____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE 56 LE _____
Bone: RE _____ LE _____
SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

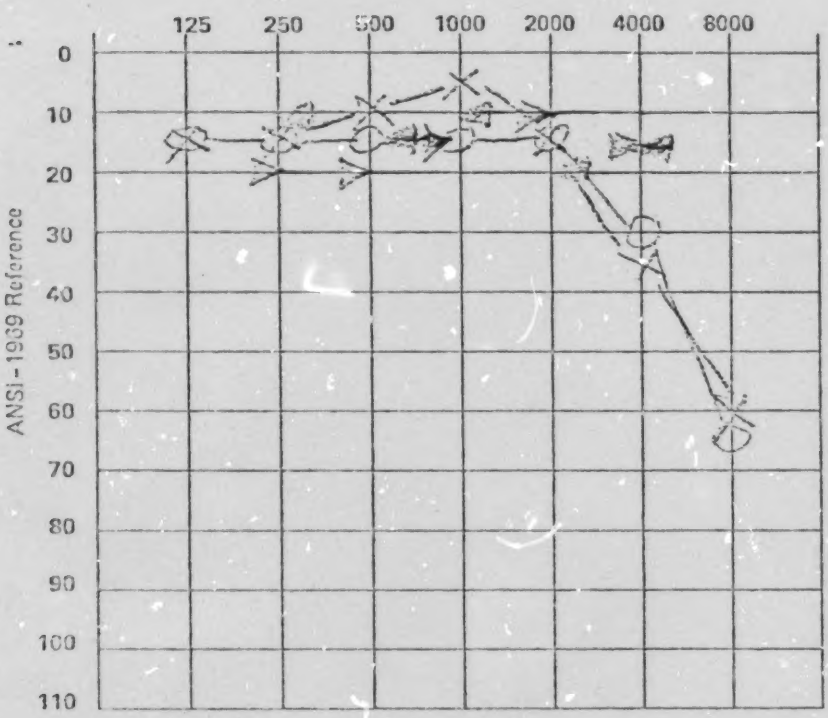
RIC ANALYSIS

Name W.B. Age 65 Date 6-26-74

Address Telephone

Referred by Infor Code Examiner E. Sonquist

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ▷ - Red (LE masked 70 dB)
LE: ◁ - Blue (RE masked 70 dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE ____
LE ____

WEBER RESULTS
RE ____
LE ____
Unloc. ____

BEKESY RESULTS: Type ____

TEST CONDITIONS
Good ____ Ave. ____ Poor ____
TEST RELIABILITY
Good ____ Ave. ____ Poor ____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE 15 LE 10
Bone: RE ____ LE ____
SPEECH AUDIOMETRIC SUMMARY
SRT
RE 13 LE 9
DISCRIMINATION
RE ____ LE ____
TOLERANCE LEVEL
RE ____ LE ____

Type of Loss ____ Extent of Loss ____

Comments and recommendations:

Name MF

Date 9-4-74 Examiner ES

Standard SRT (unaided) 63dB

Standard Discrimination - 40dB SRT (unaided) 76%

Word intelligibility (Picture) - 65dB SPL (unaided) 64%

Frequency list (unaided) 80%

Standard SRT (aided) 50 dB

Standard Discrimination - 40dB SRT (aided) 76%

Word Intelligibility (Picture - 65dB SPL (aided) 88%

Frequency list (aided) 97%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

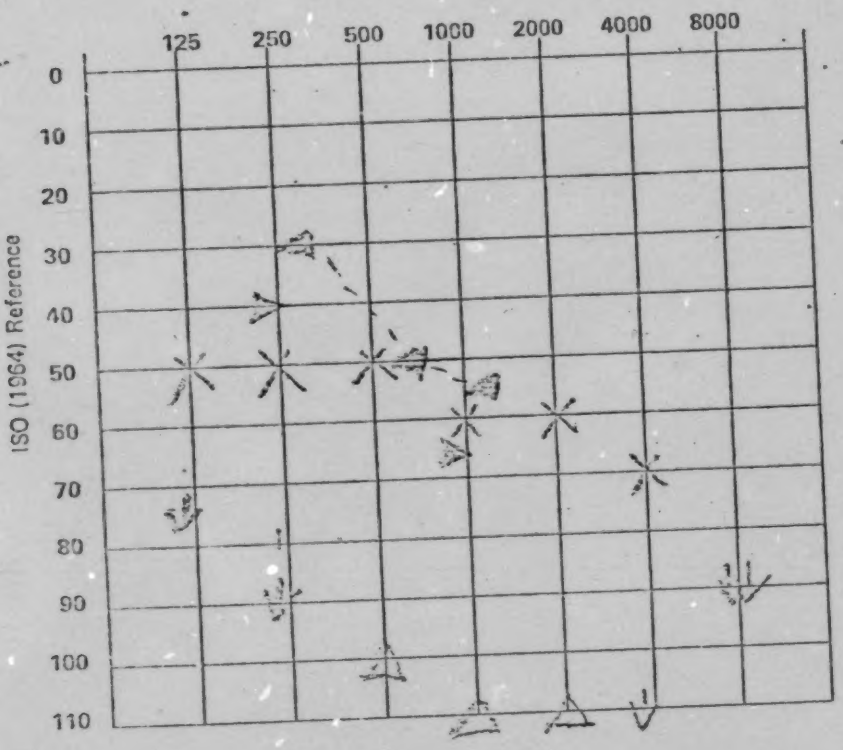
AUDIOMETRIC ANALYSIS

Name MF Age _____ Date 4-8-74

Address _____ Telephone _____

Referred by Infra Code Examiner E. Swingart

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

AIR MASKED
RE: Δ - Red (LE masked 90 dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE
RE: > - Red
LE < - Blue

BONE MASKED
RE: > - Red (LE masked 90 dB)
LE: < - Blue (RE masked 90 dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good ____ Ave. ____ Poor ____
TEST RELIABILITY
Good ____ Ave. ____ Poor ____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE 107 LE 57
Bone: RE - LE -

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:
Fenestration operation in right ear.

Name M F

Date 4/8/74 Examiner G.S.

Standard SRT (unaided) 55 dB

Standard Discrimination - 40dB SRT (unaided) 70% at 95dB

Word intelligibility (Picture) 65dB SPL (unaided) 84%

Frequency list (unaided) 100%

Standard SRT (aided) 30 dB

Standard Discrimination - 40dB SRT (aided) 80% at 70dB

Word Intelligibility (Picture - 65dB SPL (aided) 88%

Frequency list (aided) 100%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

TRIC ANALYSIS

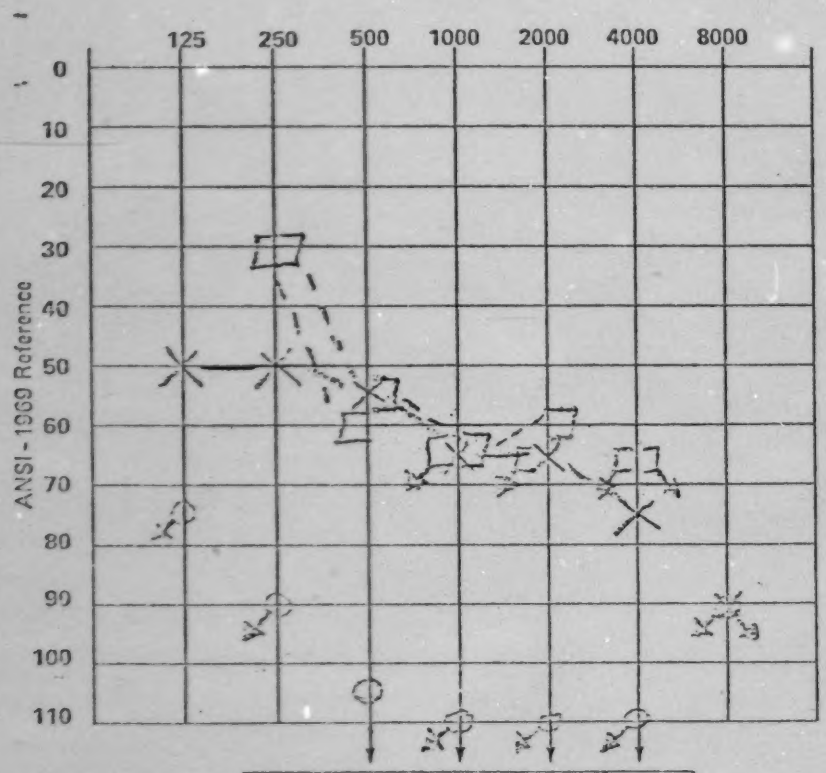
Name M F (Last) L (First) Date 9-4-74

Address _____ Birth Date _____ Age _____

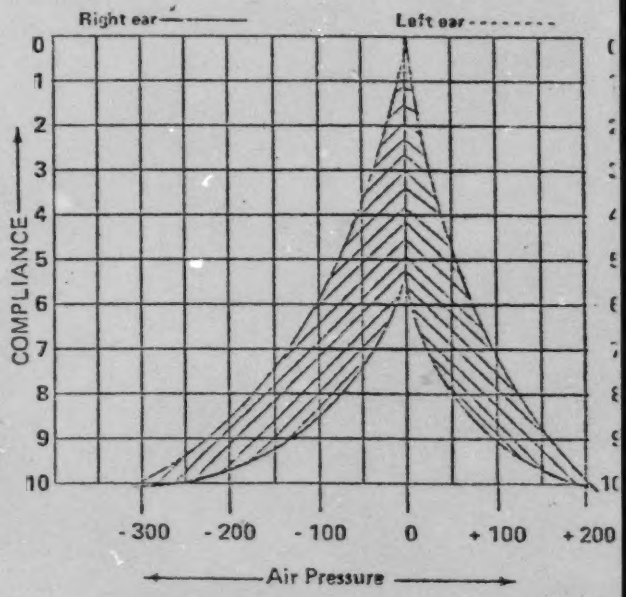
Referred by Tifco Code Examiner [illegible]

PURE TONE AUDIOGRAM

Frequency



TYMPANOGRAM

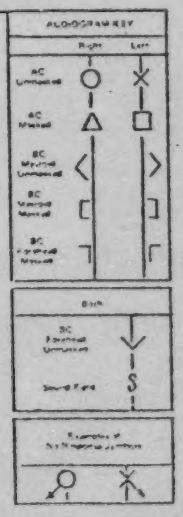


	+ 200	Null	STATIC COMPLIANCE
R Ear			
L Ear			

STAPEDIUS REFLEX

Stimulate LE				
Stimulate RE				

Comments and recommendations:



PURE TONE SUMMARY

Average Loss 500 - 1000 - 2000 Hz.

Air: RE _____ LE _____

Bone: RE _____ LE _____

SPEECH AUDIOMETRIC SUMMARY

SRT

RE _____ dB LE _____ dB

DISCRIMINATION

RE _____ % LE _____ %

TOLERANCE LEVEL

RE _____ dB LE _____ dB

Type of Loss _____

Extent of Loss _____

Nam TG

Date 1-14-74 Examiner Elwogast

Standard SRT (unaided) 100

Standard Discrimination - 40dB SRT (unaided) —

Word intelligibility (Picture) - 65dB SPL (unaided) 39%

Frequency list (unaided) 40%

Standard SRT (aided) 55

Standard Discrimination - 40dB SRT (aided) —

Word Intelligibility (Picture - 65dB SPL (aided) 72%

Frequency list (aided) 87%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

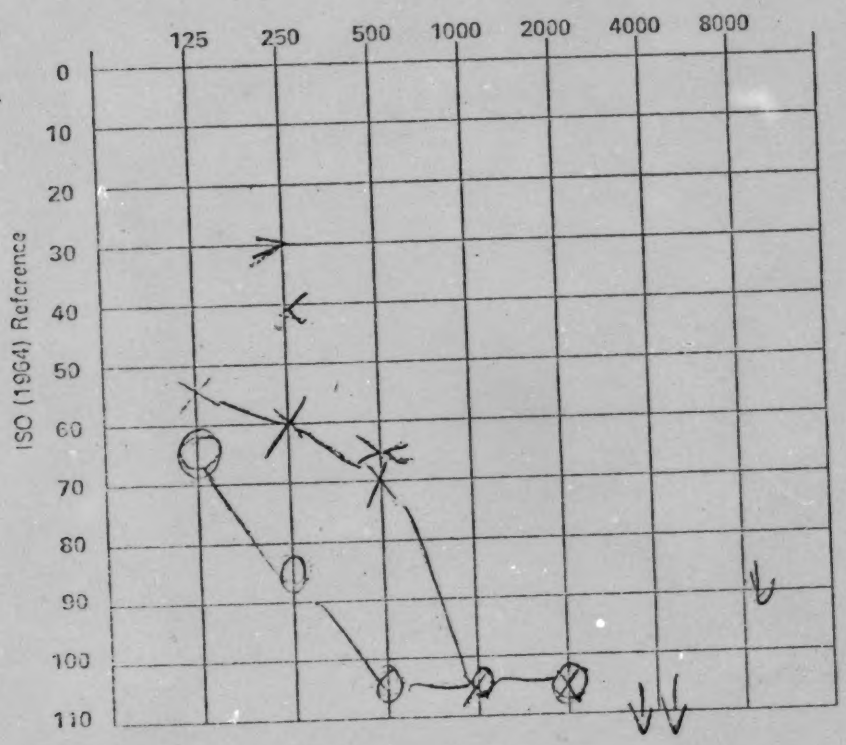
RIC ANALYSIS

Name TG Age _____ Date 1-14-74

Address _____ Telephone _____

Referred by [illegible] Examiner E Swingard

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

AIR MASKED
RE: △ - Red (LE masked _____ dB)
LE: ▽ - Blue (RE masked _____ dB)

BONE
RE: > - Red
LE < - Blue

BONE MASKED
RE: > - Red (LE masked _____ dB)
LE: < - Blue (RE masked _____ dB)

FREE FIELD – ☐

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good _____ Ave. ✓ Poor ____
TEST RELIABILITY
Good _____ Ave. ✓ Poor ____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE 105 LE 93
Bone: RE -- LE --

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Name TG

Date 4-16-74 Examiner E.S.

Standard SRT (unaided) 76

Standard Discrimination - 40dB SRT (unaided) ——

Word intelligibility (Picture) - 65dB SPL (unaided) 28%

Frequency list (unaided) 10 correct 33%

Standard SRT (aided) 68

Standard Discrimination - 40dB SRT (aided) —

Word Intelligibility (Picture - 65dB SPL (aided) 56%

Frequency list (aided) 63%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

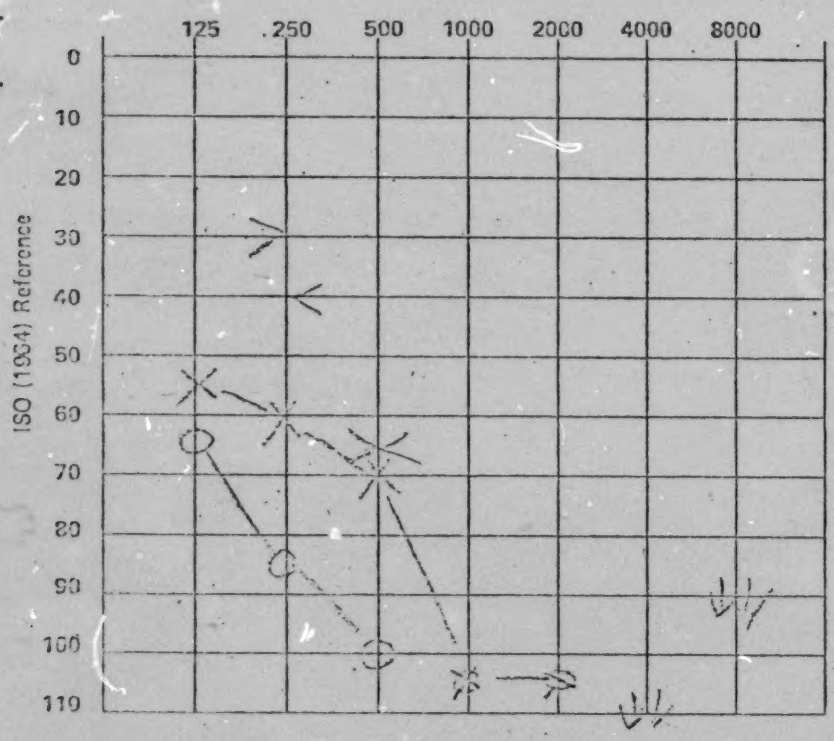
ETRIC ANALYSIS

Nam TG Age _____ Date 4-16-76

Address _____ Telephone _____

Referred by _____ Examiner E.S.

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ⊳ - Red (LE masked _____ dB)
LE: ⊲ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ✓ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good ____ Ave. ✓ Poor ____
TEST RELIABILITY
Good ____ Ave. ✓ Poor ____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE 103 LE 92
Bone: RE — LE —

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Was not wearing her aid.

Name TG

Date 6-12-74 Examiner ES

Standard SRT (unaided) —

Standard Discrimination - 40dB SRT (unaided) —

Word intelligibility (Picture) - 65dB SPL (unaided) 36%

Frequency list (unaided) 40%

Standard SRT (aided) 65

Standard Discrimination - 40dB SRT (aided) —

Word Intelligibility (Picture - 65dB SPL (aided) 68%

Frequency list (aided) 87%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

ANALYSIS

Name I G

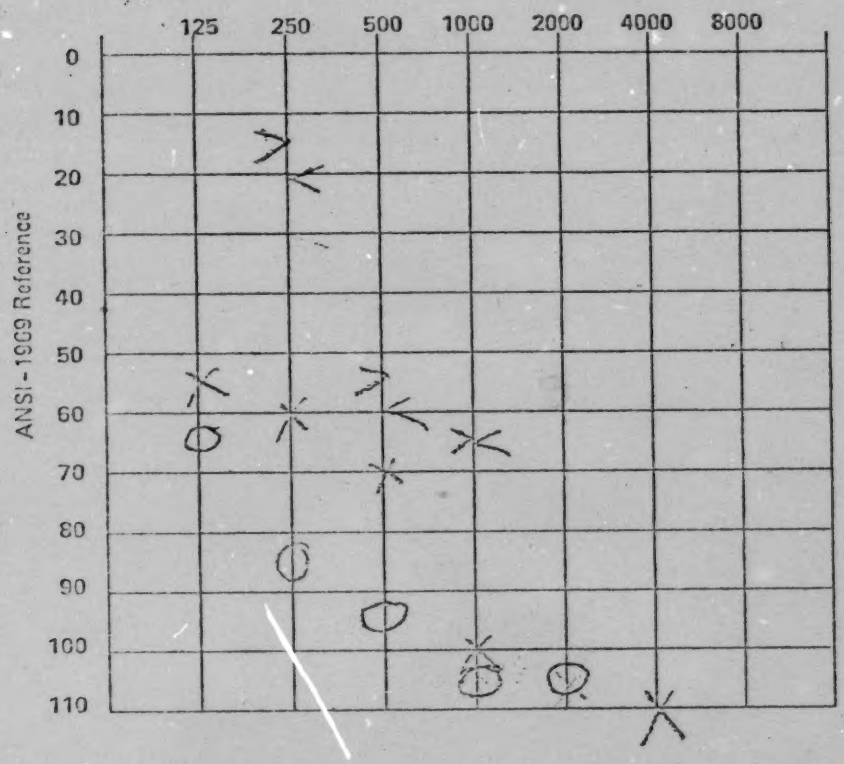
Age _____ Date 6-12-74

Address _____ Telephone _____

Referred by Indra Code

Examiner ES

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: > - Red (LE masked _____ dB)
LE: ⊣ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good _____ Ave. _____ Poor _____
TEST RELIABILITY
Good _____ Ave. _____ Poor _____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____
SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Name J.L.

Age 75 date 1-7-74

Speech therapist's evaluation of ability of patient to be audiometrically examined.

	Yes	No
Say a response	✓	
Write a response (good spelling and good penmanship)	✓	
Choose a response from a list of 25 words	✓	
Choose a response from a multiple choice list of 4 words	✓	
Choose a response from 6 pictures	✓	

J. L.

Date 1-8-74 Examiner [illegible]

Standard SRT (unaided) 38

Standard Discrimination - 40dB SRT (unaided) 88%

Word intelligibility (Picture) - 65dB SPL (unaided) 84%

Frequency designated discrim - 65dB SPL (unaided) 97%

Standard SRT (aided) 25

Standard Discrimination - 40dB SRT (aided) 92%

Word Intelligibility (Picture - 65dB SPL (aided) 84%

Frequency designated discrim - 65dB SPL (aided) 100%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

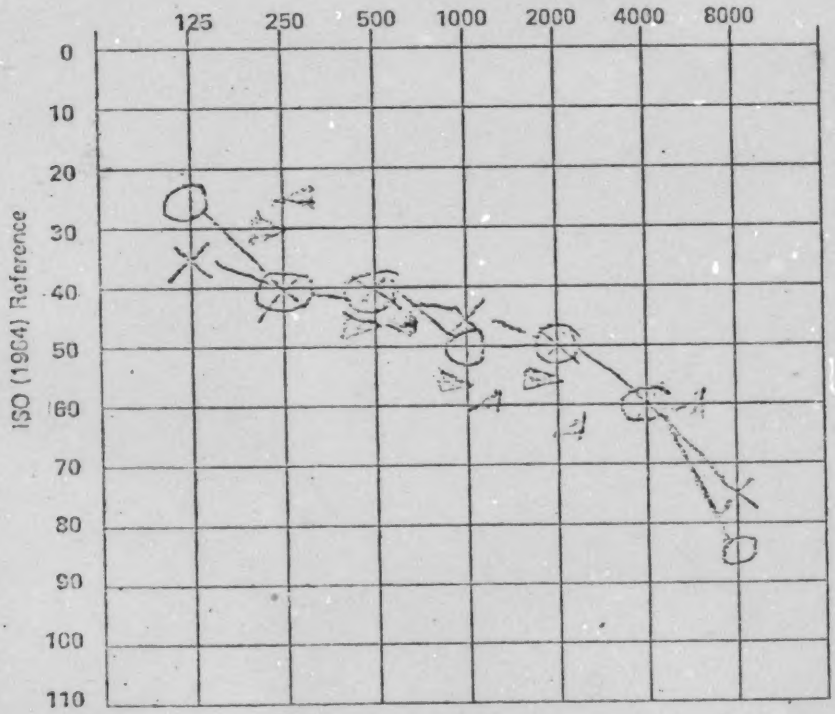
AUDIOMETRIC ANALYSIS

Name J.L. Age 75 Date 1-8-74

Address _____ Telephone _____

Referred by Tape code Examiner [illegible]

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ⊳ - Red (LE masked 65 dB)
LE: ⊲ - Blue (RE masked 65 dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good ____ Ave. ✓ Poor ____
TEST RELIABILITY
Good ____ Ave. ✓ Poor ____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE 47 LE 45
Bone: RE 52 LE 55

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss [illegible] Extent of Loss [illegible]

Comments and recommendations:

Name J.L.

Date 4/18/74 Examiner ES

Standard SRT (unaided) 40 dB

50 Standard Discrimination - 40dB SRT (unaided) 84%

Word intelligibility (Picture) - 65dB SPL (unaided) 96%

Frequency list (unaided) 97%

Standard SRT (aided) 22 dB

62 Standard Discrimination - 40dB SRT (aided) 94%

Word Intelligibility (Picture - 65dB SPL (aided) 76%

Frequency list (aided) 100%

[illegible] at time of this testing.

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

AUDIOMETRIC ANALYSIS

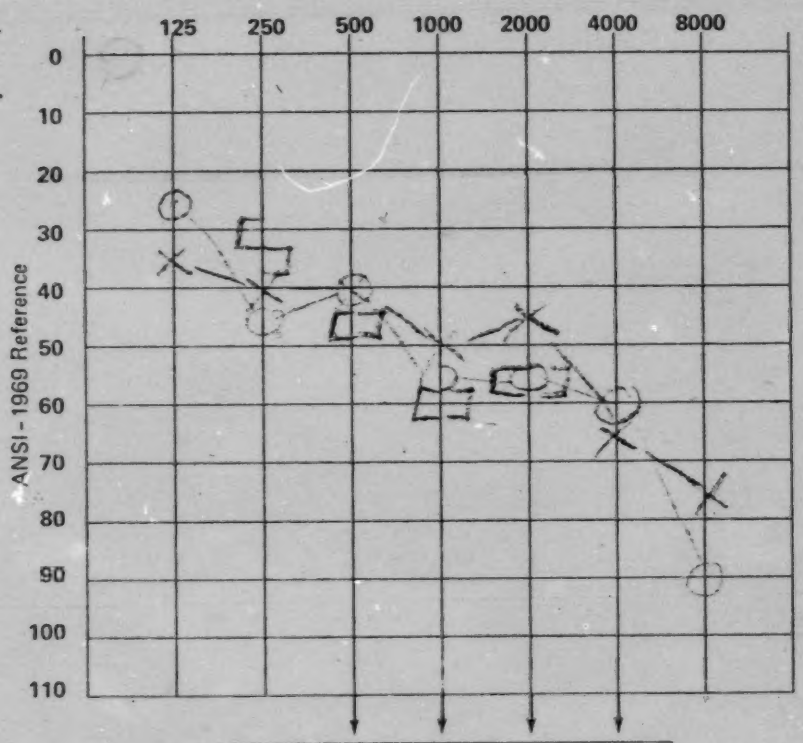
Name J L (Last / First) Date 4-18-74

Address _____ Birth Date _____ Age _____

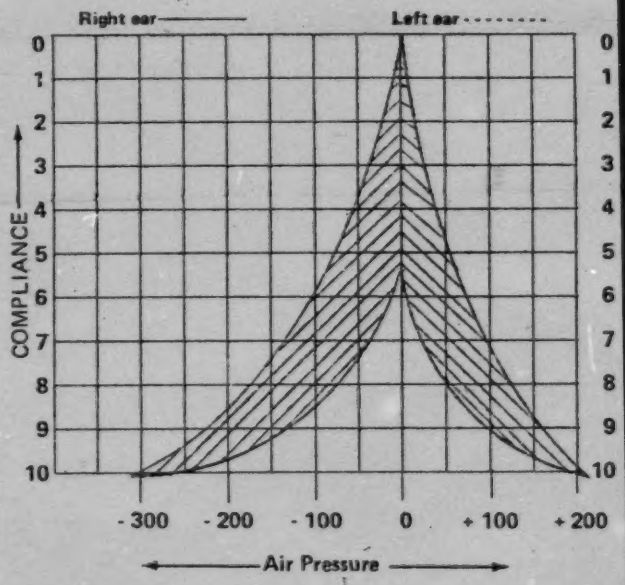
Referred by Infra code Examiner E Morgan

PURE TONE AUDIOGRAM

Frequency



TYMPANOGRAM

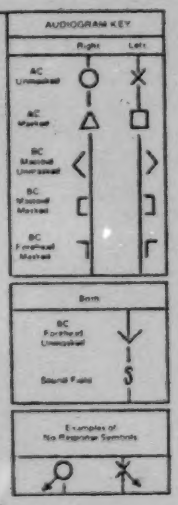


	+ 200	Null	STATIC COMPLIANCE
R Ear			
L Ear			

STAPEDIUS REFLEX

Stimulate LE				
Stimulate RE				

Comments and recommendations:



PURE TONE SUMMARY

Average Loss 500 - 1000 - 2000 Hz.

Air: RE 52 LE 45

Bone: RE 53 LE 53

SPEECH AUDIOMETRIC SUMMARY

SRT

RE _____ dB LE _____ dB

DISCRIMINATION

RE _____ % LE _____ %

TOLERANCE LEVEL

RE _____ dB LE _____ dB

Type of Loss _____

Extent of Loss _____

Name B.M.

Age 64 26 date 10-7-73

Speech therapist's evaluation of ability of patient to be audiometrically examined.

	Yes	No
Say a response	✓	
Write a response (good spelling and good penmanship)		
Choose a response from a list of 25 words		
Choose a response from a multiple choice list of 4 words		
Choose a response from 6 pictures		

Na BM

Date Oct 8-73 Examiner E. Swegard

Standard SRT (unaided) —

Standard Discrimination - 40dB SRT (unaided) —

Word intelligibility (Picture) - 65dB SPL (unaided) —

Standard SRT (aided) 100 dB (Kindergarten List)

Standard Discrimination - 40dB SRT (aided) —

Word Intelligibility (Picture - 65dB SPL (aided) 50%

Frequency List 65dB (aided) 80%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

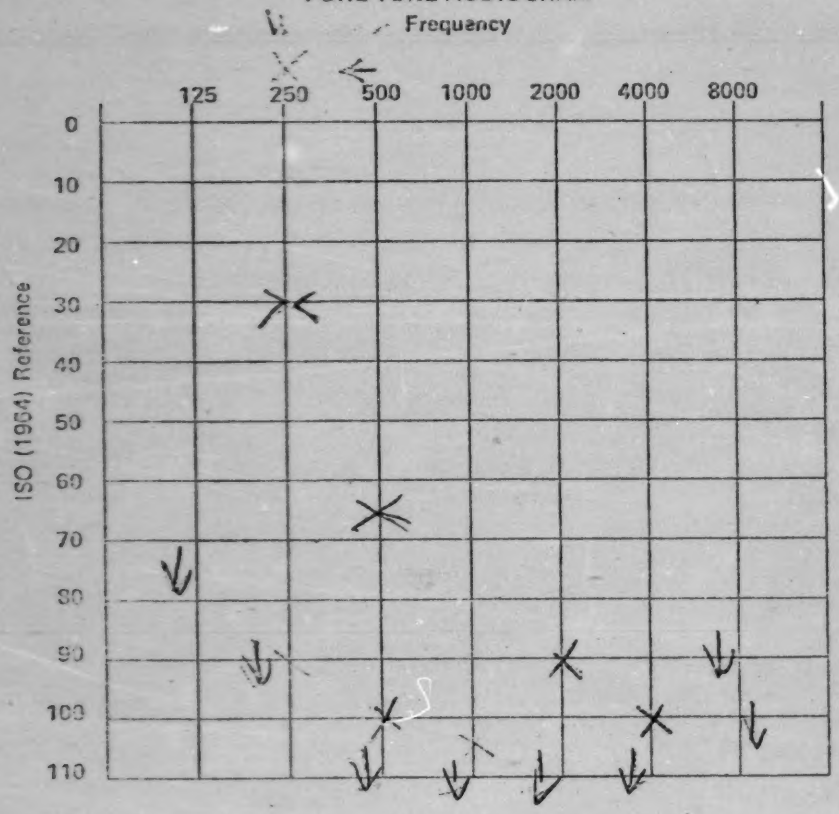
TRIC ANALYSIS

Name B.M. Age _____ Date 10-8-73

Address _____ Telephone _____

Referred by Infra Code Examiner E Swegard

PURE TONE AUDIOGRAM



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ⊳ - Red (LE masked _____ dB)
LE: ⊲ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good ____ Ave. ____ Poor ____
TEST RELIABILITY
Good ____ Ave. ____ Poor ____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Nar P N

Age 14 date 1-21-74

Speech therapist's evaluation of ability of patient to be audiometrically examined.

	Yes	No
Say a response		✓
Write a response (good spelling and good penmanship)		✓
Choose a response from a list of 25 words		
Choose a response from a multiple choice list of 4 words		
Choose a response from 6 pictures		

Name PN

Date 1-21-74 Examiner E. Lengart

Standard SRT (unaided) —

Standard Discrimination - 40dB SRT (unaided) —

Word intelligibility (Picture) - 65dB SPL (unaided) 8%

Frequency list (unaided) 23%

Standard SRT (aided) —

Standard Discrimination - 40dB SRT (aided) —

Word Intelligibility (Picture - 65dB SPL (aided) 12%

Frequency list (aided) 40%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

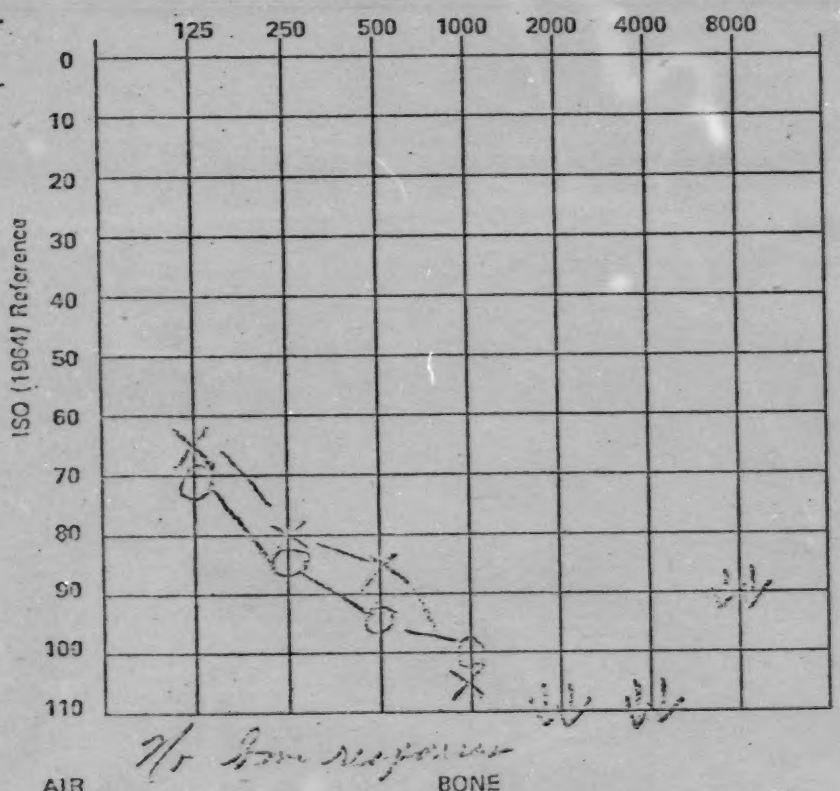
ANALYSIS

Name [illegible] Age 14 Date 1-28-74

Address Telephone

Referred by INFRA-CODE Examiner E. Swigart

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: > - Red (LE masked _____ dB)
LE: ◁ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good _____ Ave. _____ Poor _____
TEST RELIABILITY
Good _____ Ave. _____ Poor _____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____
SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Name F R

Age _____ date 3/20/74

Speech therapist's evaluation of ability of patient to be audiometrically examined.

	Yes	No
Say a response	✓	
Write a response (good spelling and good penmanship)	✓	
Choose a response from a list of 25 words	✓	
Choose a response from a multiple choice list of 4 words	✓	
Choose a response from 6 pictures	✓	

Name FR

Date 3/20/74 Examiner ES

Standard SRT (unaided) —

Standard Discrimination - 40dB SRT (unaided) —

Word intelligibility (Picture) - 65dB SPL (unaided) 20 %

Frequency list (unaided) 57%

Standard SRT (aided) 100 ?

Standard Discrimination - 40dB SRT (aided) —

Word Intelligibility (Picture - 65dB SPL (aided) 48%

Frequency list (aided) 80%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

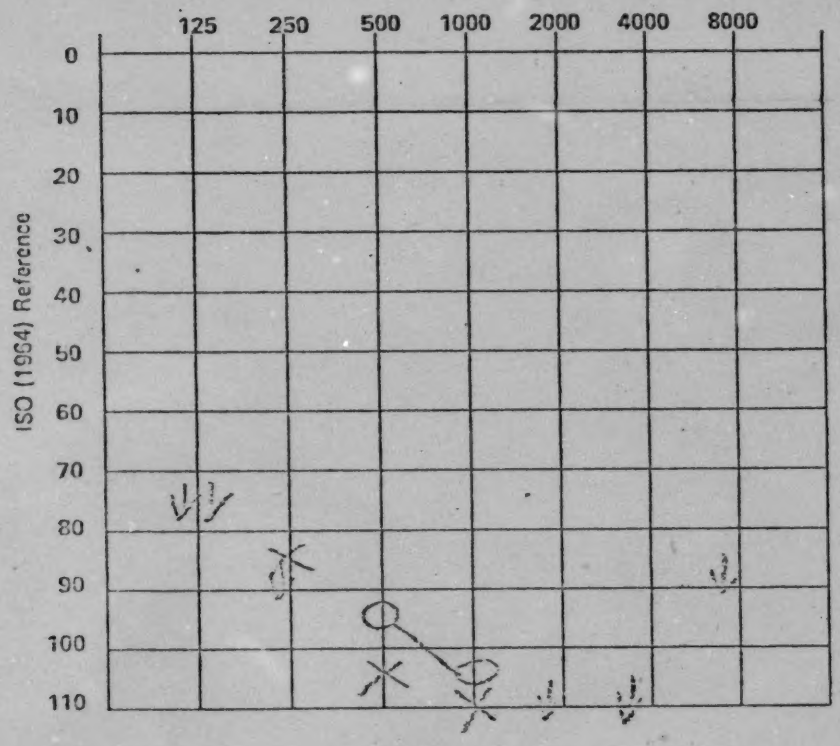
RIC ANALYSIS

Name F R Age _____ Date 3-20-74

Address _____ Telephone _____

Referred by _____ Examiner E S.

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ⊳ - Red (LE masked _____ dB)
LE: ⊲ - Blue (RE masked _____ dB)

FREE FIELD – ☐

PATIENT'S REPORT

Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS

RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS

Good _____ Ave. _____ Poor _____

TEST RELIABILITY

Good _____ Ave. _____ Poor _____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.

Air: RE _____ LE _____
Bone: RE _____ LE _____

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Nai ES

Age 22 date 1-18-74

Speech therapist's evaluation of ability of patient to be audiometrically examined.

	Yes	No
Say a response	✓	
Write a response (good spelling and good penmanship)	✓	
Choose a response from a list of 25 words	✓	
Choose a response from a multiple choice list of 4 words	✓	
Choose a response from 6 pictures	✓	

1

Name E.S. [illegible]

Date 1-18-74 Examiner [illegible]

Standard SRT (unaided) —

Standard Discrimination - 40dB SRT (unaided) —

Word intelligibility (Picture) - 65dB SPL (unaided) 40%

Frequency list (unaided) 65dB SPL 66%

Standard SRT (aided) 55 dB

Standard Discrimination - 40dB SRT (aided) 3 25%

Word Intelligibility (Picture - 65dB SPL (aided) 64

Frequency list (aided) 65dB SPL 90

1 3

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

C ANALYSIS

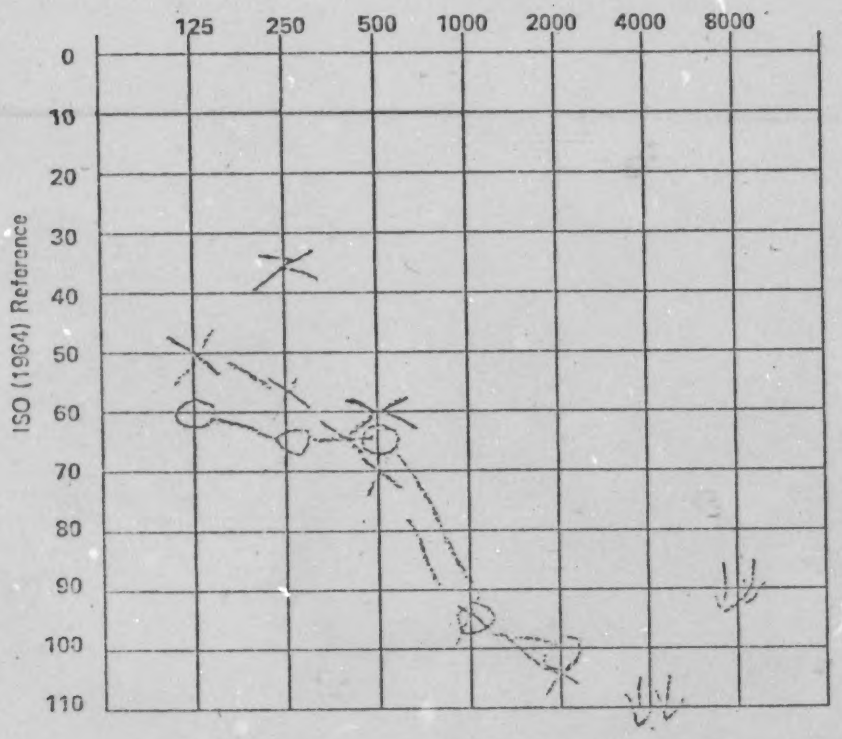
Name ES

Age 22 Date 1-11-7

Address _____ Telephone _____

Referred by [illegible] Examiner [illegible]

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ▷ - Red (LE masked _____ dB)
LE: ◁ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good _____ Ave. _____ Poor _____
TEST RELIABILITY
Good _____ Ave. _____ Poor _____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____
SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Name ES

Date 7-26-70 Examiner ES

Standard SRT (unaided) 68 dB

Standard Discrimination - 40dB SRT (unaided) 24%

Word intelligibility (Picture) - 65dB SPL (unaided) 40%

Frequency list (unaided) 73%

Standard SRT (aided) 42 dB

Standard Discrimination - 40dB SRT (aided) 46%

Word Intelligibility (Picture - 65dB SPL (aided) 72%

Frequency list (aided) 93%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

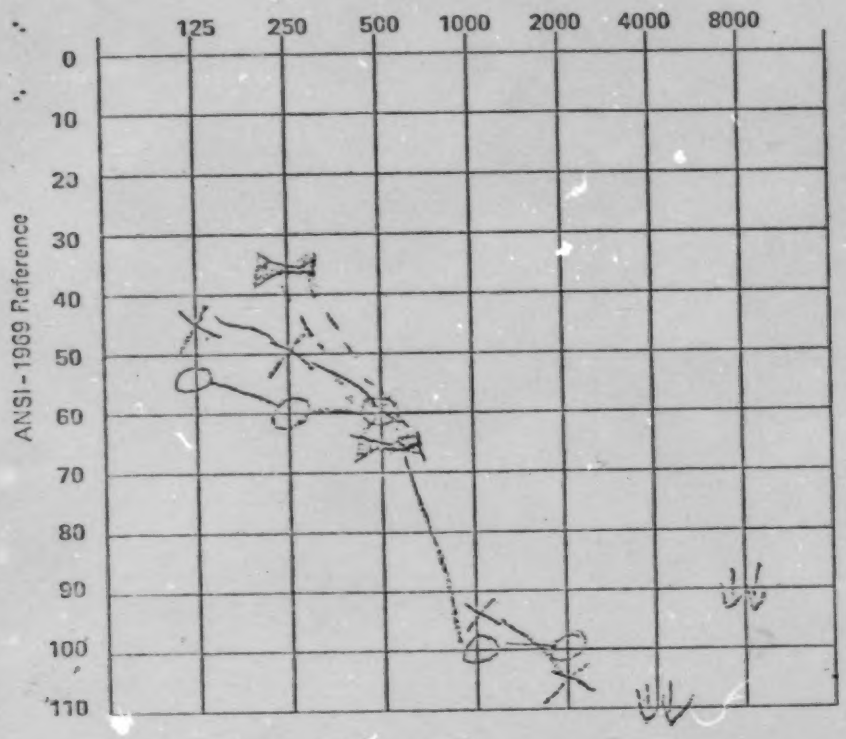
ALYSIS

Name ES Date 7-26-74

Address _____ Telephone _____

Referred by _____ Examiner EA

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ⊳ - Red (LE masked _____ dB)
LE: ⊲ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good _____ Ave. _____ Poor _____
TEST RELIABILITY
Good _____ Ave. _____ Poor _____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____
SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Name Jo S

Age 14 date 2-25-74

Speech therapist's evaluation of ability of patient to be audiometrically examined.

	Yes	No
Say a response		✓
Write a response (good spelling and good penmanship)		✓
Choose a response from a list of 25 words	✓	
Choose a response from a multiple choice list of 4 words	✓	
Choose a response from 6 pictures	✓	

Name J S

Date 5/25/74 Examiner

Standard SRT (unaided) —

Standard Discrimination - 40dB SRT (unaided) —

Word intelligibility (Picture) - 65dB SPL (unaided) 8%

Frequency list (unaided) 26%

Standard SRT (aided) —

Standard Discrimination - 40dB SRT (aided) —

Word Intelligibility (Picture - 65dB SPL (aided) 16%

Frequency list (aided) 33%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

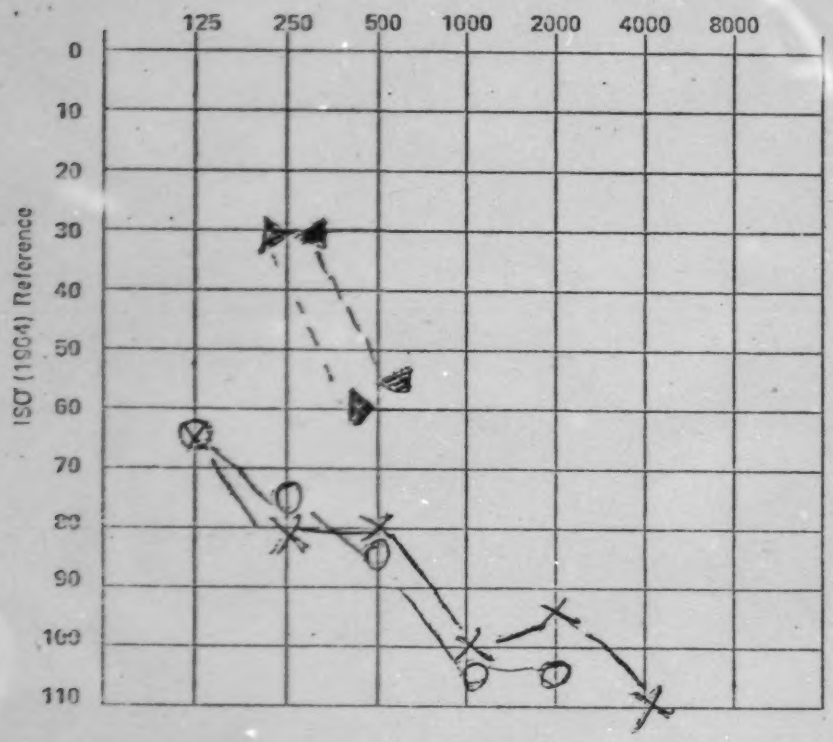
AUDIOMETRIC ANALYSIS

J S Age 14 Date 2-25-74

Address _____ Telephone _____

Referred by [illegible] Examiner E Swigart

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ⊳ - Red (LE masked _____ dB)
LE: ⊲ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good _____ Ave. _____ Poor _____
TEST RELIABILITY
Good _____ Ave. _____ Poor _____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____
SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Name L.S.

Date 5-21-74 Examiner ES

Standard SRT (unaided) —

Standard Discrimination - 40dB SRT (unaided) —

Word intelligibility (Picture) - 65dB SPL (unaided) 16%

Frequency list (unaided) 27%

Standard SRT (aided) —

Standard Discrimination - 40dB SRT (aided) —

Word Intelligibility (Picture - 65dB SPL (aided) 12%

Frequency list (aided) 27%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

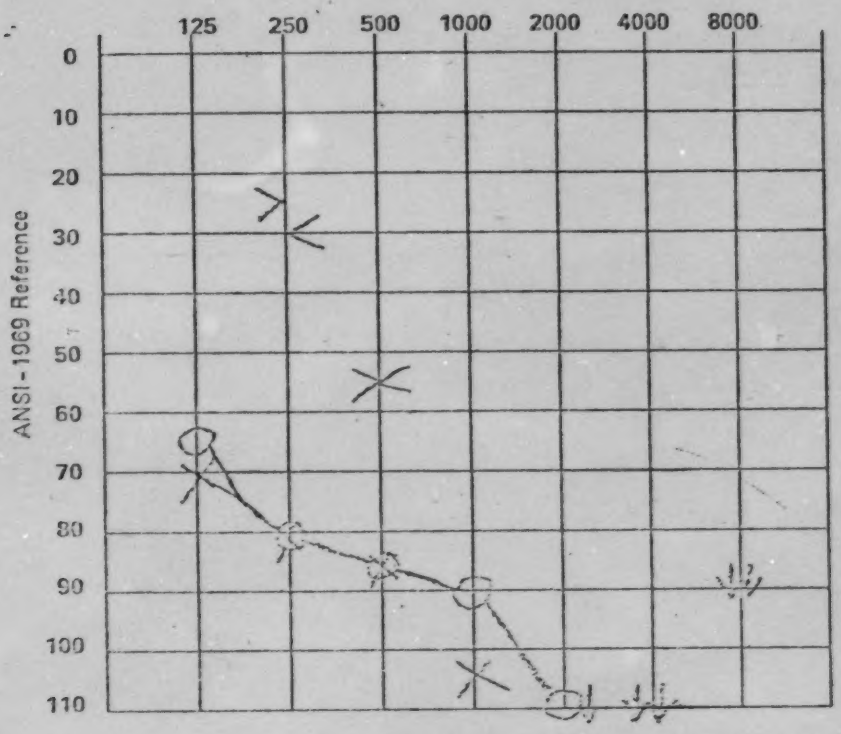
AUDIOMETRIC ANALYSIS

Name L.S. Age _____ Date 5-21-74

Address _____ Telephone _____

Referred by Arthur Cary Examiner E. Sweigert

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ⊳ - Red (LE masked _____ dB)
LE: ⊲ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good _____ Ave. _____ Poor _____
TEST RELIABILITY
Good _____ Ave. _____ Poor _____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____
SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Name M S

Age 83 date 3/19/74

Speech therapist's evaluation of ability of patient to be audiometrically examined.

	Yes	No
Say a response	✓	
Write a response (good spelling and good penmanship)	✓	
Choose a response from a list of 25 words	✓	
Choose a response from a multiple choice list of 4 words	✓	
Choose a response from 6 pictures	✓	

Name M S

Date 3/19/74 Examiner E.S.

Standard SRT (unaided) —

Standard Discrimination - 40dB SRT (unaided) —

Word intelligibility (Picture) - 65dB SPL (unaided) 28%

Frequency list (unaided) 63%

Standard SRT (aided) —

Standard Discrimination - 40dB SRT (aided) —

Word Intelligibility (Picture - 65dB SPL (aided) —

Frequency list (aided) —

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

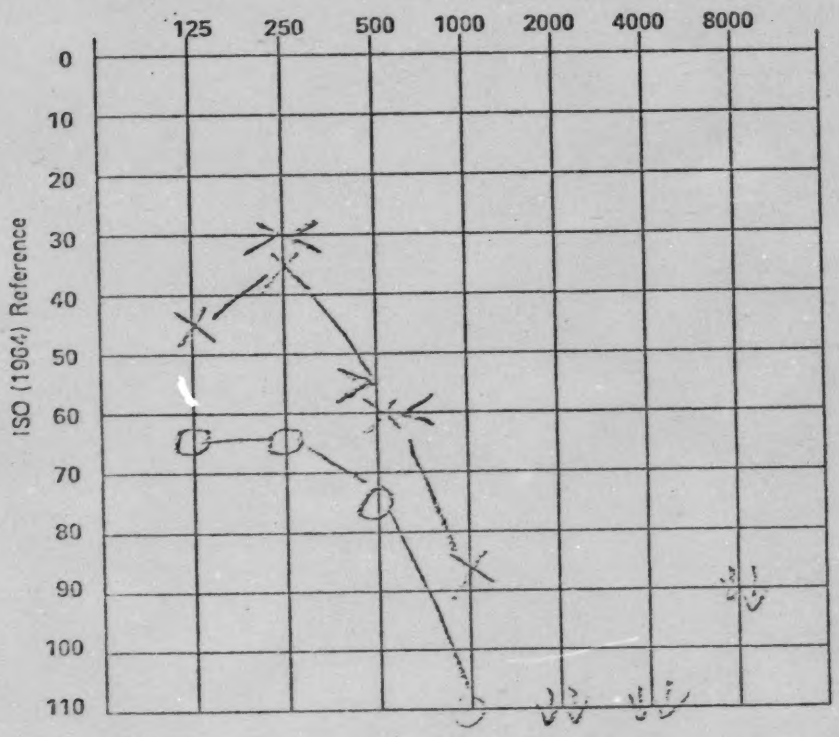
AUDIOMETRIC ANALYSIS

Name M S Age 13 Date March 19, 197

Address _____ Telephone _____

Referred by Infra Code Examiner E Sturgeot

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ▷ - Red (LE masked _____ dB)
LE: ◁ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good _____ Ave. ____ Poor ____
TEST RELIABILITY
Good _____ Ave. ____ Poor ____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Nam AW

Age 19 date 10-2-73

Speech therapist's evaluation of ability of patient to be audiometrically examined.

	Yes	No
Say a response	✓	
Write a response (good spelling and good penmanship)		
Choose a response from a list of 25 words		
Choose a response from a multiple choice list of 4 words		
Choose a response from 6 pictures		

AW

10-2-73

Standard SRT unaided 90 dB
Standard Disc ~~40 dB SRT~~ 100 dB 36%
Word intell. 8%

Standard SRT aided 60 dB
Standard Discrim. ~~40 dB SRT~~ 100 dB 26%
Word intell. aided 80%
Freq. list aided 70%

SRT Speech questionable

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

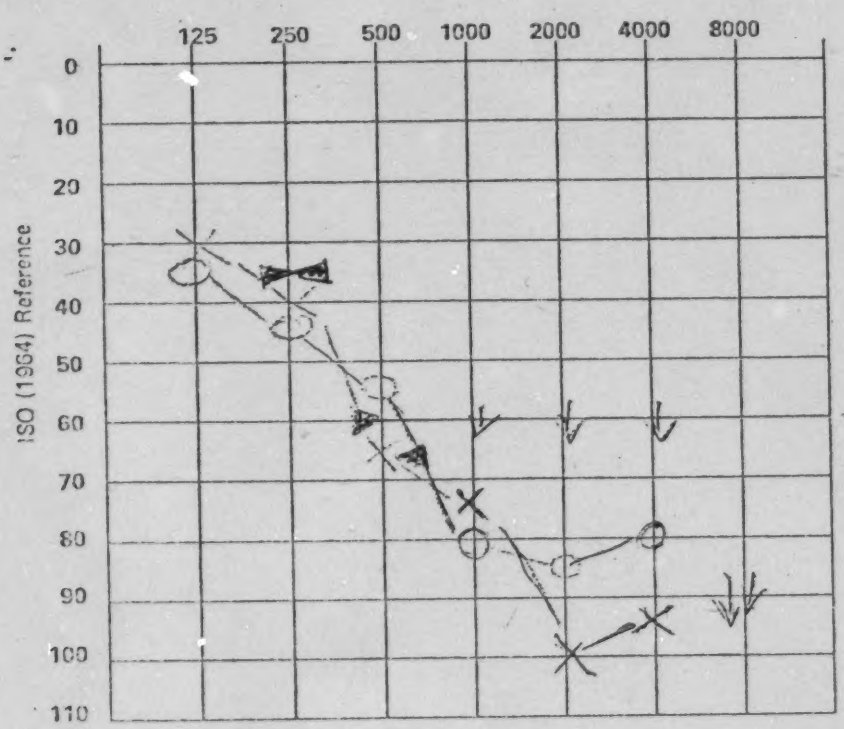
TRIC ANALYSIS

Name AW Age 19 Date Oct 2 73

Address _____ Telephone _____

Referred by _____ Examiner C Swigart

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ⊳ - Red (LE masked _____ dB)
LE: ⊲ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good ____ Ave. ✓ Poor ____
TEST RELIABILITY
Good ____ Ave. ✓ Poor ____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE 73 LE 80
Bone: RE — LE —

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Na AW

Date 2/26/74 Examiner ES

Standard SRT (unaided) 80 dB

Standard Discrimination - 40dB SRT (unaided) 24% speech questionable

✓ Word intelligibility (Picture) - 65dB SPL (unaided) 20%

✓ Frequency list (unaided) 60%

Standard SRT (aided) 40 dB

Standard Discrimination - 40dB SRT (aided) 24dB speech questionable

✓ Word Intelligibility (Picture - 65dB SPL (aided) 72%

✓ Frequency list (aided) 90%

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

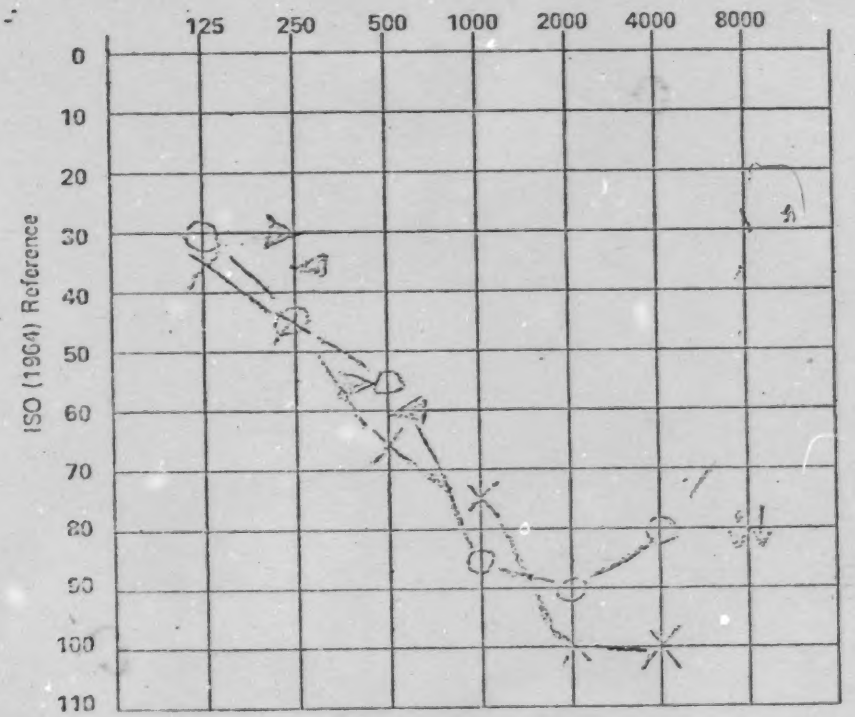
METRIC ANALYSIS

Name A. W. Age Date 2-26-74

Address Telephone

Referred by Infra Code Examiner E. Swiget

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ⊳ - Red (LE masked _____ dB)
LE: ⊲ - Blue (RE masked _____ dB)

FREE FIELD – ☐

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good _____ Ave. _____ Poor _____
TEST RELIABILITY
Good _____ Ave. _____ Poor _____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Name RW

Date 4-18-74 Examiner E.S.

Standard SRT (unaided) 30

Standard Discrimination - 40dB SRT (unaided) 100

Word intelligibility (Picture) - 65dB SPL (unaided) 100 %

Frequency list (unaided) 100 %

Standard SRT (aided) —

Standard Discrimination - 40dB SRT (aided) —

Word Intelligibility (Picture - 65dB SPL (aided) —

Frequency list (aided) —

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

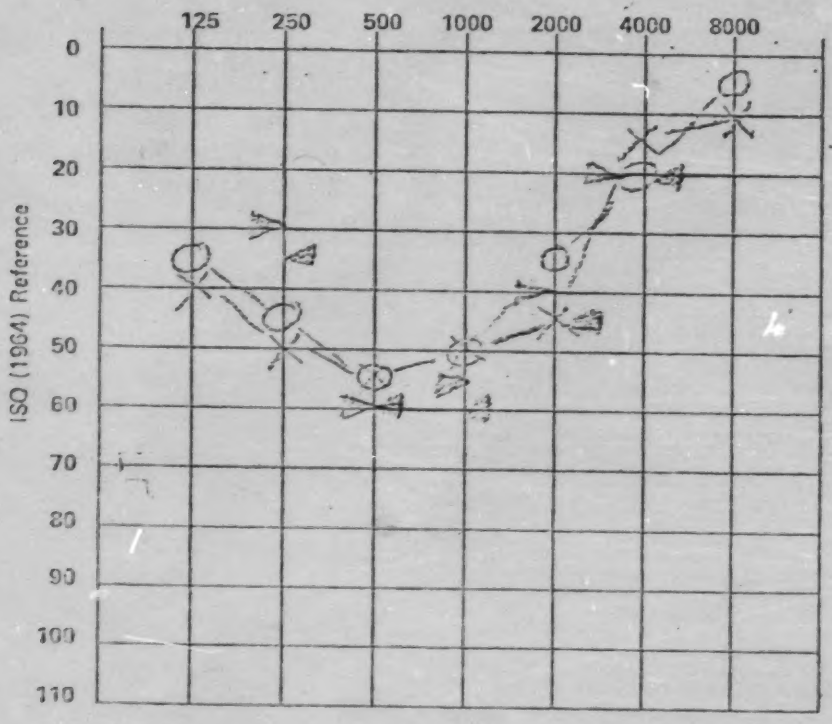
RIC ANALYSIS

Name R W Age 50 Date 4-18-74

Address _____ Telephone _____

Referred by _____ Examiner _____

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: > - Red (LE masked _____ dB)
LE: ⊣ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good ____ Ave. ____ Poor ____
TEST RELIABILITY
Good ____ Ave. ____ Poor ____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE _____ LE _____
Bone: RE _____ LE _____
SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

Name M.Y.

Age 19 date 10-9-73

Speech therapist's evaluation of ability of patient to be audiometrically examined.

	Yes	No
Say a response		✓
Write a response (good spelling and good penmanship)		✓
Choose a response from a list of 25 words	✓	
Choose a response from a multiple choice list of 4 words	✓	
Choose a response from 6 pictures	✓	

Name M4

Date 10-9-1973 Examiner E. Lurgart

Standard SRT (unaided) —

Standard Discrimination - 40dB SRT (unaided) —

Word intelligibility (Picture) - 65dB SPL (unaided) 50%

Frequency List 65dB (unaided) 33%

Standard SRT (aided) No Aid

Standard Discrimination - 40dB SRT (aided) No Aid

Word Intelligibility (Picture - 65dB SPL (aided) No Aid

Frequency List 65dB (aided) No Aid

[illegible] 1½ - 2 [illegible] in [illegible]

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

AUDIOMETRIC ANALYSIS

M Y _____ Age _____ Date 10-9-73

Address _____ Telephone _____

Referred by _____ Examiner E. Swigart

PURE TONE AUDIOGRAM

Frequency

Walker Center

125 250 500 1000 2000 4000 8000

ISO (1964) Reference

0 10 20 30 40 50 60 70 80 90 100 110

AIR

RE: O - Red
LE: X - Blue

AIR MASKED

RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE

RE: > - Red
LE < - Blue

BONE MASKED

RE: ≥ - Red (LE masked _____ dB)
LE: ≤ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT

Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS

RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS

Good _____ Ave. _____ Poor _____

TEST RELIABILITY

Good _____ Ave. _____ Poor _____

PURE TONE SUMMARY

Average Loss 500 - 1000 - 2000 cps.

Air: RE _____ LE _____
Bone: RE _____ LE _____

SPEECH AUDIOMETRIC SUMMARY

SRT

RE _____ LE _____

DISCRIMINATION

RE _____ LE _____

TOLERANCE LEVEL

RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

N M4

Date 4/9/74 Examiner U.E.S.

Standard SRT (unaided) —

Standard Discrimination - 40dB SRT (unaided) —

Word intelligibility (Picture) - 65dB SPL (unaided) 12%

Frequency list (unaided) 43%

Standard SRT (aided) no aid

Standard Discrimination - 40dB SRT (aided) no aid

Word Intelligibility (Picture - 65dB SPL (aided) no aid

Frequency list (aided) no aid

LANCASTER CLEFT PALATE CLINIC
SPEECH AND HEARING DIVISION

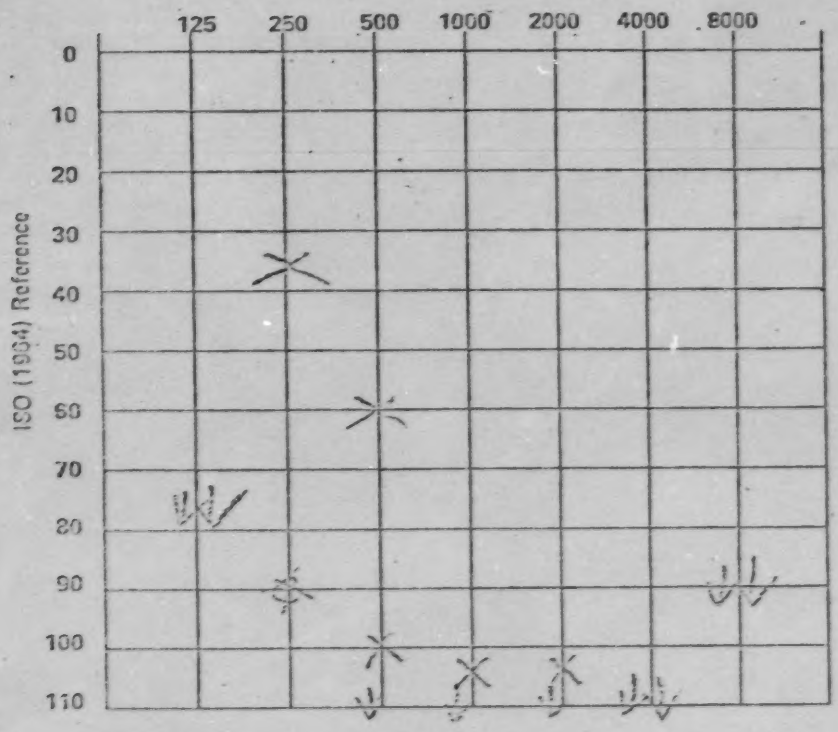
ETRIC ANALYSIS

Nam My Age 19 Date 4-9-74

Address _____ Telephone _____

Referred by Infra Code Examiner [illegible]

PURE TONE AUDIOGRAM
Frequency



AIR
RE: O - Red
LE: X - Blue

BONE
RE: > - Red
LE < - Blue

AIR MASKED
RE: Δ - Red (LE masked _____ dB)
LE: ∇ - Blue (RE masked _____ dB)

BONE MASKED
RE: ⊳ - Red (LE masked _____ dB)
LE: ⊲ - Blue (RE masked _____ dB)

FREE FIELD – □

PATIENT'S REPORT
Hearing: Constant ____ Varies ____
Hearing Today: Better ____ Same ____ Worse ____
Cold Today: Yes ____ Slight ____ No ____
Tinnitus: RE _____
LE _____

WEBER RESULTS
RE _____
LE _____
Unloc. _____

BEKESY RESULTS: Type _____

TEST CONDITIONS
Good ____ Ave. ✓ Poor ____
TEST RELIABILITY
Good ____ Ave. ✓ Poor ____

PURE TONE SUMMARY
Average Loss 500 - 1000 - 2000 cps.
Air: RE [illegible] LE 103
Bone: RE [illegible] LE —

SPEECH AUDIOMETRIC SUMMARY
SRT
RE _____ LE _____
DISCRIMINATION
RE _____ LE _____
TOLERANCE LEVEL
RE _____ LE _____

Type of Loss _____ Extent of Loss _____

Comments and recommendations:

ACCESSION NUMBER: VT102363

PUBLICATION DATE: 30JUN74

TITLE: THE SEMINAR PRACTICUM. A COMMUNITY BASED INSTRUCTIONAL SYSTEM FOR PARAPROFESSIONAL EDUCATION. FINAL REPORT.

DESCRIPTOR: *DEMONSTRATION PROGRAMS; *FOOD SERVICE OCCUPATIONS; *DIETETICS; *FIELD EXPERIENCE PROGRAMS; *PRACTICUMS; SEMINARS; INDIVIDUALIZED INSTRUCTION; PROGRAM EVALUATION

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 210P.

ABSTRACT: THE SEMINAR PRACTICUM IS AN INSTRUCTIONAL SYSTEM IN HOSPITALITY EDUCATION, DEVELOPED AND VALIDATED FROM 1971-1974 AT PENNSYLVANIA STATE UNIVERSITY. THE PARTICULAR EMPHASIS WAS ON THE DEVELOPMENT OF A CONTROLLED FIELD EXPERIENCE AS A SUBSTITUTE FOR TRADITIONAL LABORATORY AND CLASSROOM EXPERIENCES. THE INSTRUCTIONAL MODEL THAT EMERGED FROM THE PLANNING IS BASED ON A TRIAD OF LEARNING RESOURCES: A SET OF SELF-INSTRUCTIONAL MODULES, EXPERIENCE IN THE WORK PLACE, AND THE WEEKLY SEMINAR. A PROGRAM FOR DIETARY TECHNICIANS BASED ON THE SAME SEMINAR PRACTICUM INSTRUCTIONAL MODEL ALSO EMERGED FROM THE PROJECT. THIS REPORT PRESENTS A DETAILED VIEW OF THE CONCEPTUALIZATION OF THE SEMINAR PROCESS, DIFFICULTIES, AND MODELS EMPLOYED IN DEVELOPING THE SELF-INSTRUCTIONAL MATERIALS; A REPORT BASED ON A YEAR'S EXPERIENCE IN TEACHING THE SEMINAR PRACTICUM; OBJECTIVE MEASURES OF STUDENT PERFORMANCE; AND FINALLY, A SUMMARY OF VIEWS OF STUDENTS, FACULTY, AND INVOLVED EMPLOYERS OF THE EFFECTIVENESS OF THE SEMINAR PRACTICUM. (AUTHOR/NJ)

INSTITUTION NAME: PENNSYLVANIA STATE UNIV., UNIVERSITY PARK. FOOD SERVICE AND HOUSING ADMINISTRATION.

SPONSORING AGENCY NAME: PENNSYLVANIA RESEARCH COORDINATING UNIT FOR VOCATIONAL EDUCATION, HARRISBURG.

T 102 363

SERVICE MANAGEMENT REPORTS

THE SEMINAR PRACTICUM:
A COMMUNITY BASED INSTRUCTIONAL SYSTEM
FOR PARAPROFESSIONAL EDUCATION

FOOD SERVICE AND HOUSING ADMINISTRATION

THE PENNSYLVANIA STATE UNIVERSITY

VT 102 363

2

FINAL REPORT

THE SEMINAR PRACTICUM:

A COMMUNITY BASED INSTRUCTIONAL SYSTEM

FOR PARAPROFESSIONAL EDUCATION

Project Number: 19-3003

School Unit: 4-10-14-720-1

Submitted to

Dr. Carroll A. Curtis,
Director

PENNSYLVANIA DEPARTMENT OF EDUCATION

BUREAU OF VOCATIONAL EDUCATION

RESEARCH COORDINATING UNIT

Thomas F. Powers, Ph.D.,
Professor in Charge

Food Service and Housing Administration

Human Development Building
THE PENNSYLVANIA STATE UNIVERSITY
University Park, Pennsylvania 16801

June 30,1974

Acknowledgments

A large number of people in the Pennsylvania Department of Education have been helpful to us in the implementation of this project. I would especially like to thank Dr. Furman Moody, former Director of the Research Coordinating Unit; Miss Anne Eiffler, former Home Economics Specialist in the Department of Education; and Dr. John W. Struck, State Director of Vocational Education, for giving the project an early and sympathetic hearing. Dr. Carroll Curtis, Director of the Research Coordinating Unit and his staff have been most helpful. And particular note of thanks must go to Dr. Clarence Dittenhafer, who not only watched over the project for the Department but also gave valuable advice on a number of substantive matters.

At Penn State the list of those to whom we are indebted begins with Dr. Donald Ford, Dean of the College of Human Development and Dr. Harold Perkins, Director of the Berks Campus. Their support for and patience with the move of the Hotel and Food Service Program to Reading made our whole effort possible.

Dr. Marjorie East, chairman of the Department of Home Economics Education gave early encouragement and her faculty were helpful in many ways: Dr. Twyla Shear, for example, in instructional system design and review of modules; and Dr. Susan Weis in system evaluation. In addition, "Home Ec Ed" gave us one of their brightest graduates, Suellen Wayda, as a key participant in the project, and her outstanding performance speaks well for the Department. A number of graduate students

in Home economics Education were involved either formerly or informally as consultants and advisors on the Food Production modules. Angelo Bentivegna and Joseph Cioch were especially helpful.

The module development, on which so much of this project rested, relied on the foods expertise of my wife, Jo Marie Powers, to a much greater extent than credits elsewhere indicate.

Much of the work done on module development was able to move forward at a rapid pace because of earlier work done by my wife and me at Atlanta's Morris Brown College with the support and direction of an innovative leader in Home Economics, Miss Mattie Waymer.

I would also like to acknowledge the editorial assistance of John R. Swinton. He made many useful criticisms of early drafts and supervised the final production of the report, carrying many headaches with good grace.

Without the outstanding performance of two devoted and energetic faculty members in Reading, Professors James Hicks and Kahle Innes, this experimental system could never have been tested in such a short period. Finally we must acknowledge the students at Berks, who gave this new approach to Hospitality Education a fair and open hearing--and who by and large found they liked it.

Thomas F. Powers

University Park, Pennsylvania

June, 1974

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INTRODUCTION:
DEVELOPMENT OF A VALIDATED INSTRUCTIONAL SYSTEM FOR HOSPITALITY EDUCATION

by

Thomas F. Powers

In early 1971, a proposal to validate an instructional system for hospitality education was submitted to the Research Coordinating Unit of The Department of Education of the Commonwealth of Pennsylvania. The particular emphasis in the instructional system was on the development of a controlled field experience as a substitute for traditional laboratory and class experiences. The reasons for undertaking this project were several.

First of all, while a great deal of research undoubtedly had been done by individual hospitality management programs, this research typically resulted in the establishment of or the modification of a single institution's program. Local research was not generalized and resulted only in the development of a specific curriculum at a specific institution rather than a prototype which might be used by others. Moreover, whatever work was done had results which were institutional in form and did not manifest themselves in the form of publications which could form a basis for planning--or comparison. The demonstration program specified that not only would a program be developed and validated but the results would also be disseminated in the widest possible fashion.

The second problem perceived was that the expensive form which "foods" laboratory courses take require facilities that are expensive both to equip and to operate. Moreover, it was felt that these laboratories were essentially an artificial setting to teach subject matter that could perhaps be taught as well in an industry setting. Thus a research goal of this program was to determine whether the substitution of a controlled field experience for traditional curriculum elements could take place without a reduction in the quality of learning on the part of the student.

The project was justified not only on the basis of a need for research in this area and in operating problems relating to the laboratory foods course but also in terms of industrial and social need. Service industries were seen as fast growing fields in which management personnel specifically prepared to operate in the industry were not being supplied in anywhere near sufficient numbers, as documented by interviews with industry education leaders. Finally, the hotel and food service fields were recognized as fields in which minority groups were often employed. The position was advanced that the development of an associate degree offering which (because it emphasized a required, paid, work experience) would have recruiting advantages in lower income areas, would be particularly responsive to challenges to our society.

Objectives

The objectives of the project were (1) to design an instructional system, supporting instructional materials, and evaluative measures to substitute for traditional laboratory and classroom experiences; (2) to implement the instructional system; (3) to investigate the influence of

the instructional system on the level of achievement, vocational performance, vocational commitment, and career prospects for students; and (4) to study the effectiveness of the instructional system in attracting and retaining students from lower income and minority groups.

Project Operations

During the first year of the program, an existing associate degree program was transferred from the University's University Park Campus to its Berks Campus in the area of Reading, Pennsylvania (hereafter, "the Berks Program"). First year courses that used the traditional classroom method of instruction were offered at the Reading Campus and, in the meantime, a team at University Park undertook the preparation of the self-instructional modules to accompany the controlled field experience classes which were planned for offering in the second year of the student's program of studies.

The Seminar Practicum

The instructional system which emerged from the early planning was christened "The Seminar Practicum." This instructional system proposed to rely on a triad of learning resources. The first of these was the experience in the work place. The second was a set of self-instructional modules which focused the student's attention in the work place on appropriate subject matter on a week-by-week basis, supplementing the learning available to the student in the work place, and establishing standards which might be more rigorous than those encountered in some work places. The third was the Seminar: a weekly meeting in which the students used their experience as the basis of discussion and were guided by their professor.

During the second year the seminar practicum was offered in a test mode and the student performance was evaluated. On the basis of this test year, the instructional modudules were revised and these modules were again tested in the third year of operation. During that third year, on the basis of two years teaching experience, instructors' manuals were prepared to provide assistance to new instructors in adapting this instructional system to their own particular style of teaching.

Related Developments

In 1971 a proposal was submitted to the Public Health Service to develop the same associate degree program utilizing the seminar practicum, for Dietary Technicians rather than for students interested in commercial hotel and food service management. This proposal was a direct result of the project funded by the Research Coordinating Unit.

The Public Health Service funded the development of the parallel program, which began offering courses in the Fall of 1972 at the York Campus (hereafter: "the York Program"). During 1972 the first year courses were offered while the self-instructional modules for that curriculum were written on the basis of those developed and tested during the previous years at the Berks Program. During the second year of the York Porgram, those modules were tested and evaluated in the classroom. During that year, also, the Public Health Service, in a second grant, funded the devlopment of this degree for delivery by an external mode, using correspondence and other media.

A Report on Results

In 1973, a series of four papers were presented to the American

Home Economics Association summarizing the first year of the Berks program. Three of these papers are reproduced in later portions of this report. In November, 1973, two papers were presented to the American Dietetic Association outlining the conceptualiziation and early results of the Dietary Technician Program at York. One of these papers is reproduced later in this report. Finally, in June, 1974, two papers were presented giving a final report on the development of the Berks Program, and these two papers are also reproduced here.

Summarizing the results of the operation of the operation of the two test programs (Berks and York), one would have to say that the seminar practicum has been judged by students and faculty to be an eminently successful means of delivering hospitality education. The Berks Program, which has been subject to evaluative study, appears to offer a high quality educational program. Personal interviews with recent graduates indicate, in general, enthusiastic and overwhelming support for the seminar practicum, and interviews with cooperating employers support this conclusion.

The balance of this report presents a detailed view of the conceptualiziation of the seminar process, difficulties, and models employed in developing the self-instructional materials; a report from a year's experience in teaching the seminar practicum; objective measurements of student performance; and finally, a summary of views of students, faculty and involved employers of the effectiveness of the seminar practicum. Because the dietary technician program grew out of the work accomplished in the Berks Program, as did the development of the external mode of that degree, a summary of the dietary technician program is also presented. Work which remains to be done related to

the development of an external degree and upper division programs is outlined.

In the course of a project of the nature and duration of this one, a good deal occurs that was not originally planned; this is certainly true in the case of the redesign of the Hotel and Food Service curriculum. In the next section, material that our faculty members have reviewed in the process of conceptualizing the paraprofessional role is presented to show why it is useful to think of the Hotel and Food Service program (and the Dietary Technician program) as fundamentally paraprofessional from a functional standpoint.

The last section of this report presents a brief discussion of some of the policy issues raised by the work undertaken in this and other paraprofessional education system design projects. Although some of the material presented in this report is not part of the output originally specified by the project, the report would simply be incomplete without these additional considerations. The sections describing what has been accomplished as a direct--and indirect--result of this program are unquestionably the minimum that might be included in this report.

The section that attempts to lay a basis structure for thinking about "knowledge workers" or paraprofessionals and the educational goals of programs related to students preparing for these roles; the section on "Work Undone"; and the final section that reprises the basic issues our society faces as education focuses increasingly on relating specifically to emerging manpower needs rather than on General Education reflect the indirect outcomes of this project. Since these lay the groundwork for future study and work, they are, in some

ways, the most important chapters in this report.

The instructional manuals that accompany HFS 850, 860, and 870 have not been included as parts of this report. Instead they have been printed separately as University instructional materials and are available through the Food Service and Housing Administration Program, Human Development Building, The Pennsylvania State University, University Park, Pennsylvania, 16802.

I

PARAPROFESSIONAL: WHAT'S IN A NAME?

by

Thomas F. Powers, Ph.D.

PARAPROFESSIONAL: WHAT'S IN A NAME?

by

Thomas F. Powers, Ph.D.

Introduction

In an increasingly complex society, the nature of work is evolving, and we need new models for thinking of work and education for that work. With a new model must come a new vocabulary, and the word "paraprofessional" is a convenient shorthand term for a complex development which must shape the evolution of curricula in Hospitality Education.

Our society's increasing complexity is accepted as a commonplace. Various scholars view the effects of growing complexity on manpower needs in different lights. Zbigniew Brzezinski, for example, coined the term, "Technetronic Society" to describe a central force in this evolution: technology and particularly electonic technology.[1] While Brzezinski sees technology as the central issue, Daniel Bell views the emergence of scientific knowledge as the major development, and he documents the increasing importance of technical and scientific manpower roles.[2] Peter Drucker sees "the systematic and purposeful acquisition of information and its sytematic of information and its systematic application, rather than 'science' or 'technology'--as the new foundation for work."[3]

The trend toward knowledge as a central productive resource of our society is a pervasive one and, as Drucker points out, it is the key to increasing productivity in our age--much as the machine was during the Industrial Revolution. At the center of this development is the emergence

of a new work role Drucker calls the "Knowledge Worker."[4] If workers and managers in the Hospitality Industry are to enjoy the increased incomes based on the increased productivity of "knowledge workers," conscious curricular strategies must be devised to replace a craft oriented mentality in Hospitality curricula with a compulsion to identify and develop an appropriate knowledge base.

What's in a Name?

There are a number of arguments against applying the title "paraprofessional" to students in the commercial emphasis of the Hotel and Food Service Associate Degree Program which is the subject of this report (the Berks Program). At least one study, however, based on a survey of 194 colleges and reporting 1006 human service paraprofessional programs, classified two out of the 12 general fields identified clearly within the occupational objectives of the Berks Program ("Hotel, Motel, and Food Service" and "Institutional Services.")[5]

The objections to the use of the term "paraprofessional" to denote graduates of the Berks program, while theoretical in nature, are undoubtedly valid. First of all, there seems to be a consensus among most writers in this field that the paraprofessional partakes in large measure of the ideal of the disinterested professional who renders service on the basis of the client's need rather than his own self interest.[6] Since Berks students are preparing for work in the commercial sector of the economy this disinterestedness is not generally a part of their work. Moreover, almost all paraprofessional roles described in the literature are those in which the paraprofessional works directly with and generally under the close supervision of someone designated as a professional. (Many of

these professionals, however, are referred to by Etzioni as "semi-professionals."[7]

Where an educational paraprofessional augments and expands educational services of a "professional" teacher (by working closely with the professional) and a medical paraprofessional augments and expands the services of a doctor, the typical graduate of the Berks program may be expected to be a manager of a unit (a department, a firm, or a franchise operation). He will not typically be in a supportive role relative to some professional: in fact, the hospitality firm is not a "professional" organization.

While these theoretical arguments have unquestioned merit, viewing the matter in a broader context of a general type of manpower demand--for "intermediate managerial personnel"--may offer theoretical justification for the paraprofessional designation. In a sense, the Berks graduate, rather than supplementing and supporting a professional, plays a role of supplementing management in a system of diverse Hospitality services. As a paraprofessional, he supplements the entrepreneurial and managerial skills that are central to the system in which he works by providing an intermediate level of supervision and administration in a service network.

In any case, these theoretical arguments are not central to the selection of the term "paraprofessional" to describe Berks graduates. The term is employed to serve as a basis for considering a new curriculum model of two-year Hospitality Programs.

A Critique of Hospitality Curricula

The hospitality industries, like most American institutions, have

their roots in European versions of those industries. The hotel and restaurant work roles were originally derived from European craft and artisan roles. Even the hotel and restaurant manager derived originally from the European role of hotelier which is, itself, much more of an artisan than a mangerial role.[8] At the heart of the artisan role is an unchanging tradition.[9]

The European artisan tradition dominated the hospitality industry until very recently, and Hospitality industries are still characterized by a small firm size. It appears that the "Americanization" of work, which accompanied the introduction of scientific Management by Taylor and others and was backed by the substantial resources of the large firms in manufacturing, came later to the Hospitality industries than to the manufacturing industries. In a time of Ronald McDonald, computerized reservation services, and a swimming pool in every court yard, it can hardly be argued that Americanization has yet to take place in the Hospitality industries. As is often the case, however, educators lag behind industry and, as a group, we are still struggling in the morass of traditionalism which our industries began leaving in the late 40's and early 50's.

While no "scientific" data is available to sanctify the observation, the writer's conversations with hospitality educators (and the errors contained in his own work in curriculum design) suggest that the concepts of the field are shaped, to a very large degree, by more or less standard curriculum "pieces" fitted together in a limited variety of traditional ways.

Perhaps the best example of this practice is the problem of "foods courses." Debate focuses, first of all, on whether or not there should

be "hands on" foods lab courses in a hotel and restaurant curriculum. Those who argue for inclusion of these courses generally have in mind an almost ritual observance of a pattern of "working all stations" and a very limited amount of role playing as manager.

On the other hand, those who oppose offering these courses argue that "we're not training cooks!" The first position typically ignores the evolution--indeed, revolution--in food processing and focuses, instead, on a purist "preparation from scratch" strategy. The lab's opponents assert that "you don't have to be able to cook to run a restaurant," but they have yet to make a case that ignorance of cooking is any advantage in that occupation. To suggest briefly the impact of a knowledge based strategy: The Seminar Practicum recognizes that familiarity with cooking skills (thus, field experience with cooks) is an important part of a manager's background in an indsutry where senior operating executives are rarely more than one or two echelons above the production worker. At the same time, the learning modules developed for the Berks program do make a useful start toward presenting (1) cognitive learning experiences related to the scientific basis of the process of food preparation, (2) the dynamics of the supplier industries, and (3) the need for certain basic "how to" managerial skills related to planning and performance evaluation (payroll and food cost control techniques, in particular) in food service operations.

The term "paraprofessional," then, is introduced to focus attention on the knowledge-based curricula developed for paraprofessionals in other fields. Such a shift, the writer hopes, will result in the development of curricula for more productive, higher paid knowledge workers in the hospitality field.

Defining "Paraprofessional"

The balance of this paper will develop a definition of "paraprofessional" by identifying the paraprofession's social and economic functions. No discussion of paraprofessionalism could be complete without a brief discussion of the work done under the rubric of "New Careers." Following this discussion, attention will focus on a spectrum of professionalism suggested by Etzioni and will contrast the developmental stage of the paraprofessional with what Etzioni calls the "semi-professional." Finally, drawing on somewhat fragmentary evidence, the author will make an attempt to move toward a work-centered definition of paraprofessional roles as contrasted with an essentially social purpose definition advanced by the New Careers advocates.

New careers. The basic apologia for New Careers is Pearl and Reissman's New Careers for the Poor, which puts forward the notion that the problem of poverty must be solved by developing employment opportunities for the poor. The goals for new careers specified in New Careers for the Poor include

1. A sufficient number of jobs for all persons without work.
2. Jobs so defined and distributed that placements exist for the unskilled.
3. Jobs that are permanent and provide opportunity for lifelong careers.
4. An opportunity for the motivated and talented poor to advance from low-skill entry jobs to any station available to the more favored members of society.
5. The Work that contributes to the well-being of society.[10]

The redesign of work proposed is intended to break down established skilled and professional work into segments which can be done by "the

unskilled, inexperienced and relatively untrained worker."[11] in a manner such as to circumvent arbitrary requirements (as perceived by the authors).[12] The goal is operationalized in the phrase, "Obtain service from the poor in the place of providing service to the poor."[13] The need is seen to develop work roles that are not dead end, but rather articulated within the now widely discussed career ladder concept. Since this work is to be accomplished in the public sector and carried out under the close direction of professionals, the term "paraprofessional" was adopted to describe the new careerist.[14] (A number of other titles including "new professionals, "non-professionals," "new careerists," "indigenious workers," and "aides" are also used.)

In a progress report on New Careers, Gartner notes that the use of paraprofessionals antedates the New Deal but was given impetus by the Roosevelt Administration. A "continuing concern for meeting manpower shortages characterized the program of the 1950's and early 60's." The Economic Opportunity act of 1964 provided the base impetus to New Careers program by providing funding and calling for the development of employment opportunities.[15] Within one year, 46,000 workers in Head Start and 25,000 in Community Action had been designated "paraprofessionals." In 1969, a survey of OEO paraprofessionals found 78 percent black, 80 percent female, and 48 percent who were not high school graduates.[16]

Four factors characterized early New Careers programs: (1) development of entry-level employment opportunities; (2) assurance of maximum prospects for advancement and continued employment;(3) provision of a broad range of supportive services; and (4) inclusion of educational and training assistance.

A discussion of the New Careers programs is essential to this paper because it has had a profound impact on one widely used meaning of the term "paraprofessional." Thus, in 1972 the U.S. Department of Health, Education and Welfare issued a document summarizing "Paraprofessional Training in Colleges and Universities," which adopts the New Careers frame of reference to such an extent that other forces shaping the development of paraprofessionals are virtually ignored in the discussion of the data in the report.[18] It is to those "other forces" that we now turn our attention.

Paraprofessionals as knowledge workers. As the discussion above suggests, the most clearly work-centered definition of "paraprofessional" is found in the field of health care. A recent set of articles in the Occupation Outlook Quarterly sets forth seven knowledge-based sets of paraprofessional roles.[19]

The Journal of Allied Health is devoted to interdisciplinary studies related to health care professionals and paraprofessionals. A recent article in that journal suggests that the "New Careers scramble" may be inappropriate to this field.[20] Another clearly emphasizes the importance of knowledge mastery as opposed to social need.[21] And a third reports on the emerging codification of objective requirements for health care paraprofessionals.[22]

Another field making wide use of paraprofessionals is education. In this field, the paraprofessional's work includes "assisting in the classroom, in the library, in the guidance office, in the home or wherever supportive services are needed to extend education."[23] An Office of Education estimate put the number of paraprofessionals employed in education in 1979 at 225,000.[24] The program of study to prepare

for a paraprofessional role in education appears to be an expression of a well-defined knowedge base.[25]

Parallel developments in supportive manpower development are reported in the legal profession in both social agency[26] and commercial and industrial[27] legal work in the developing role of the "para-legal." Paraprofessional roles have been identified in a number of other fields. "Job Safety and Health" is the subject of a two-year program of study being offered by seven community colleges.[28] Boston College's "Center for Consumer Law" offers a program to prepare paraprofessional neighborhood consumer investigators, and H.E.W. is reported considering funding more courses.[29] A large number of administrative paraprofessional roles are reported by the 1970-71 HEW study referred to earlier.[30]

It is instructive to contrast the paraprofessional with that group of workers Etzioni has called the "semi-professionals," principally teachers, nurses, social workers, and librarians. The semi-professionals are seen as aspiring to full professional status and thus challenging the status quo to demand more of the three valuables society offers for work: prestige, power, and income.[31]

While the semi-professionals aspire toward upward mobility, the paraprofessional has, in effect, been put forward by others. Thus, the legal profession develops para-legals to take on routine research and administrative chores, saving the more expensive attorney's time--and it is the law firm that develops the training tool to deliver this new skill. The case of the Dietary Technician offers an even clearer example of a role being put forward where no such role heretofore existed. The "Dietary Technician" is a term invented by the American Dietetic Association and given limited sanction by that body to solve emerging

food service and nutrition care problems in hospitals and extended care facilities.

These work-based definitions of the paraprofessional have in common the fact that they all reflect market demand for services rather than social policy concerns. The economic function of the paraprofessional role--actually, an economizing function--is to save the time of the more expensive professional. The demands for the professional's time are expanding and, at the same time, the professional encounters greater demands that require a greater investment of both his time and effort for professional qualification. To compensate for this added demand, the professional is allowed to increase the cost of his services. As the professional's time becomes more expensive, the need for intermediate skill assistance becomes economically feasible and, indeed, essential.

The social function fulfilled by paraprofessionals relates to the more complex service systems that characterize our society today. The mix of services offered by the typical franchise motor hotel is vastly greater than those of a hotel of a similar size of 25 years ago--and yet the skills and training of the manager of such a property may be significantly less than those of the preceding hotelier. This is true because the franchise system routinizes nearly all aspects of management, leaving the manager the task of selecting from a repertoire of standard operating procedures those that fit the task at hand. While a great deal of independent judgment is still called for, the routines for maintenance, food service planning, housekeeping, reservations procedures, and entertainment services (TV, pool) simply did not exist in the earlier hotel system. We would intend that the paraprofessional in hospitality management be qualified by experience subsequent to

graduation as well as by education to serve as an Innkeeper. This is one aspect of the New Careers thrust that appears to have applicability in the private sector hospitality firm: the notion of career progression based on continuing education. This idea gives rise, in a later section of this report, to the identification of a need for External Degree Programs leading not only to the associate degree but to a degree on the baccaluaureate level, as well.

Conclusion

As the paraprofessional in Hospitality Education follows a work-based model, the task of curriculum design should not be that of constantly reworking "pieces" of the oral tra ltion of a craft into ever better renderings of an eternal truth--which has too often been the practice. Rather, our task is to identify and evolve consciously a knowledge base. Only this strategy can secure the productivity and income gains of the knowledge worker for the Hospitality industries. The seminar practicum and the Hotel and Food Service Curriculum discussed at length elsewhere in this report, are useful steps in this direction

Notes

1. Zbigniew Brzezinksi, Between Two Ages: America's Role in the Technetronic Era (New York: Viking Press, 1970).

2. Daniel Bell. The Coming of Post Industrial Society: A Venture in Social Forecasting (New York: Basic Books, 1973).

3. Peter F. Drucker. The Age of Discontinuity (New York: Harper and Row, 1968).

4. Ibid., pp. 264-69.

5. Martha A. Burns. New Careers in Human Service: A Challenge to the Two Year College, Center for the Study of Higher Education, The Pennsylvania State University, University Park, Pa. 1971, pp. 41-43.

6. William J. Goode, "The Theoretical Limitations of Professionalization, in Amitai Etzioni, ed. The Semi-Professions and Their Organizations (New York: The Free Press, 1969), p. 278.

7. Etzioni as ed. of Goode, op. cit.

8. This observation is based in large part on the writer's participation in management training activities for European hotel managers undertaken by the Intercontinental Hotel Company. Extended conversations with Mr. Peter Balas of the Paris Intercontinental and Mr. Robert E. Kulka of the Beirut Intercontinental, both of whom mix European and American education and experience, were particularly helpful to the writer.

9. Drucker, op. cit., p. 302.

10. Arthur Pearl and Frank Reissman. New Careers for the Poor (New York: The Free Press, 1965), p. 2.

11. Ibid., p. 13.

12. Ibid., p. 26.

13. Ibid., p. 22.

14. Ibid., p. 157.

15. Alan Gartner. Paraprofessionals and Their Performance: A Survey of Education, Health and Social Service Programs (New York: Praeger, 1971), pp. 3-6.

16. Aaron C. Alexander. A Summary of the Types of "Paraprofessional Training" Provided by Junior and Senior Colleges and Universities in the Area of Health, Education and Welfare During Academic Year 1970-71 (Washington, D.C.: U.S. Government Printing Office, n.d.), pp. 6-7.

17. Ibid., p. 7.

18. Ibid., p. 8.

19. Annie Lefkowitz and Marlene Ausmus. "Opportunities in Subprofessional Health Occupations." Occupational Quarterly (Winter, 1970), pp. 6-18.

20. Robert E. Kinsinger. "What This Country Doesn't Need is a Left Carotid Artery Technician, Or A Career-Based Response to the 'New Careers Scramble'." Journal of Allied Health (Winter, 1973), p. 10.

21. William E. Blewett. "Minority Students' Special Needs and Recruitment." Journal of Allied Health (Winter, 1974), p. 22.

22. Ruth Roemer. "Trends in Licensure, Certification and Accreditation: Implications for Health Manpower Education in the Future." Journal of Allied Health (Winter, 1974), p. 26.

23. Encyclopaedia of Education, Vol. II, p. 158.

24. Ibid., p. 159.

25. See ibid., pp. 160-161, for a discussion of the rationale for new staffing positions and a description of a curriculum for training auxillaries.

26. Ronald L. Godlfarb. "The Emerging Legion of Paralegals." The Washington Post, July 31, 1973.

27. Anonymous. "The Hot Job Market for Paralegal Aides." Business Week (June 29, 1974), p. 86.

28. Anonymous. Work Related Abstracts (Detroit: Information Coordinators, Inc., 1944).

29. Anonymous. "Boston Program Employs Neighborhood Consumer Investigators." Business Week (July 22, 1972), p. 42.

30. Alexander. op. cit.

31. Etzioni, op. cit., p. vi.

II

THE SEMINAR-PRACTICUM: THE KNOWLEDGE WORKER AND THE KNOWLEDGE BASE IN HOSPITALITY EDUCATION

by

Thomas F. Powers, Ph.D.

THE SEMINAR-PRACTICUM: THE KNOWLEDGE WORKER AND THE KNOWLEDGE BASE IN HOSPITALITY EDUCATION

Thomas F. Powers, Ph.D.
Professor in Charge
Food Service and Housing Administration
The Pennsylvania State University

Introduction

Peter Drucker, in The Age of Discontinuity, points out that, "Thirty years ago, on the eve of World War II, semi-skilled--operators--were the center of the American work force.[1] Today the center is the knowledge worker, the man or woman who applies to productive work ideas, concepts, and information rather than manual skill or brawn . . . . The productivity of knowledge has already become the key to productivity, competitive strength, and economic achievement."[2] A more common term for the knowledge worker in educational circles today is para-professional.

The development of the role of the para-professional is responsive to at least three basic needs of a dynamic society. First of all, the para-professional role responds to a fundamental change in the nature of work in our society. As Drucker points out, "The systematic and purposeful acquisition of information and its systematic application, rather than "science" or "technology" are emerging as the new foundation

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[1]This article is adapted from a speech delivered before the American Home Economics Association's 64th Annual Meeting, Atlantic City, New Jersey, June 27, 1973.

[2]Peter F. Drucker, The Age of Discontinuity, New York: Harper and Row; 1968, p. 264.

for work, productivity, and effort throughout the world . . . . We are using knowledge more and more to enable people to acquire skills of a very advanced kind fast and successfully. . . . knowledge substitutes systematic learning for exposure to experience."[3] Very clearly, then, the education of the para-professional must be designed to secure an appropriate knowledge base; the para-professional is a knowledge worker.

A second need of a Democratic society is the demand for a "piece of the action" presented by those who have been disadvantaged, principally "interior immigrants."[4] displaced from our country's vanishing traditional agricultural society. Para-professional educational programs, too, may accomplish better than average results, both from the point of view of the student's life chances and from the productivity increment society may expect to derive from individually more productive lives, among those students Jencks and Reisman speak of as offering the most promise as recruiting targets: the less than brightest yet able student" from the bottom half of the social ladder."[5] Demands for upward mobility have often been met by applied fields of education. Education shaped for these needs should relate to roles where opportunity for advancement is a reality.

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[3] Ibid, p. 266-68.

[4] Philip M. Hauser, "Demographic Factors in the Integration of the Negro," Daedalus, Fall, 1965, p. 859.

[5] Christopher Jencks and David Reisman, The Academic Revolution, (New York: Anchor Books, Doubleday and Co., Inc.; 1968, 69) p. 131.

Thirdly, para-professional education is a useful response to the changing cost benefit equation in four year education.[6] For some students, post secondary education involves a cultural decision; they aspire to the company of educated men and women. For many students and their families, however, higher education is an economic decision intended to achieve specific economic goals related to level and security of income. The rapidly escalating cost of higher education has put four-year education beyond the reach of many students. For others, that cost when compared to the income benefits they may realistically expect suggests serious review of alternate options. One such option is a two-year program leading to a specific para-professional role. Para-professional education may usefully, therefore, attempt to minimize net cost to the student.

The field of Institution Administration has quite properly broadened its concerns to include the hospitality industries. This field is among the last to begin the development of the "knowledge worker" for their industries. It is an industry which has long been manned largely by the underprivileged. A need has been recognized in associate degree programs throughout the United States and abroad to prepare people to enter the supervisory and middle-management ranks of that industry. The exploding demand for supervisory and management personnel offers reasonable assurance of placement for qualified graduates and an opportunity for subsequent advancement.

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[6]Eli Ginsburg, "The Outlook for Educated Manpower," The Public Interest, Winter, 1972, p. 109.

Much of the excellent work done in Hospitality Education Program Development, however, is localized in single programs and not generalized so that the benefit of experience in one place may be adapted to the needs of others.

A Controlled Field Learning Experience

The richness of field experience has always been an essential part of hospitality education. Traditionally, however, field experience has played a very unstructured role in which the behavioral objectives of the field experience were specified only in the most general and broad terms. Under these circumstances, field experiences have been typically either uncontrolled or controlled only in a limited way by the requirement of a brief report from the student at the end of such an experience.

Working under a grant from the Research Coordinating Unit of the Department of Education of the Commonwealth of Pennsylvania, an innovative instructional system has been developed making much more intensive use of the controlled field experience. This system has been named the Seminar-Practicum. The principal operating goal has been to develop an instructional system responsive to the needs of the associate degree program in Hotel and Food Service offered at Penn State. The system under development has, however, been viewed from the first as a system which might be generalized for other Hospitality Education Programs.

This new instructional system relies on a triad of learning opportunities presented to the student. First of all, the student is required to work as an employee on a part-time basis in an industry setting.

The second element of the instructional system consists of self-instructional modules which direct the student's attention in the workplace, on a week-by-week basis, to the subject matter areas to be addressed as the course progresses. The self-instructional modules not only provide a vehicle for controlling the focus of the student's attention but also for supplementing the student's learning in the workplace.

The final element in the instructional triad is a weekly seminar for some 3-1/2 hours length. The function of the seminar is principally one of clarification and integration of the week's learning experiences. While there is some information input (lectures, demonstrations, informal guidance, etc.) and evaluative activities are a part of each seminar (quizzes, homework, recitation, etc.), the principal focus is twofold. First of all, discussion of any learning problems the student may have experienced is necessary. Secondly, three kinds of comparisons are being made more or less continuously by students among themselves in and out of class and in student-faculty discussion.

a. The student compares the information in the module with the practice and problems experienced in his workplace.

b. Students compared work experiences with one another, discovering the variety of the world of work and contrasting that variety with the pedagogically "ideal" world.

c. Instructor and student discuss the issues raised by the contrasts found. The instructor's role is that of authoritative interpreter.

It may be useful, now, to visualize how the seminar-practicum operates for an individual student. The student is employed in a food service establishment approved by program faculty. Let us assume that the student has reached the point in this particular seminar-practicum where he is concerned with meat cookery. It is to be hoped that the student will be working at this point on the meat preparation station, but if he is not, a minimum constraint on the system is that he must have access to the meat station for observation and for questioning. The instructor in the most recent seminar will have prepared the student for the subject matter he is to attend to during the week. As the week progresses, the student reads the self-instructional module. That module begins with a stated set of behavioral objectives for the student, contains explanatory text written in straight forward prose, and workbook exercises which permit the student to determine whether he has completed the learning activity satisfactorily. If he is not satisfied with his work, he can seek help from his work supervisor or from other students and at the point that he is satisfied return to the next activity. In the event that he is unable to satisfy himself, he can turn to the instructor who will maintain office hours for the purpose of answering difficult questions.

To take one behavioral objective in a section on meat cookery, it is important for the student to know the accurate means of determining when a roast is cooked to a desired degree. This should be done with a meat thermometer. Accordingly the student must know what a meat thermometer is, how it is inserted, and how it operates. The student should observe the use of the meat thermometer, learn to insert it, and learn to read it. In <u>this</u> example, however, the role of the instructor

is unusually important because many food service operations, because of their traditional orientation, still do not use meat thermometers. Consequently, the student may call on the instructor not only to find out how to use the meat thermometer, since he cannot find one, but also to try to determine why it is that the practice in the field is different from the ideal practice presented in the text. The model of the instructor's role here is clear.

A more straight forward example involves employee scheduling. The module introduces conventions for describing and analyzing employee scheduling. The student, after reading these materials, performs straight forward scheduling activities described in simplified textbook problems. Having mastered these problems, the student moves on to describing and critically analyzing the employee schedule of one or more departments in his workplace. The solution (and the errors!) encountered in his workplace are then available in well thought out detail for comparison in seminar with those found by other students.

At the end of the week's work, the student submits his or her workbook exercises to the instructor. The instructor check at this point is on a "go-no go" basis. That is, the instructor simply satisfies himself that the student has or has not concluded the workbook assignment. At the beginning of the class, a class quiz determines whether the student has retained the material that he has worked on. If the student or the instructor is not satisfied with the student's performance on the quiz, a number of optional behaviors are possible, such as relearning, reviewing the material, or obtaining peer help or a tutorial. Of course, one option with failure

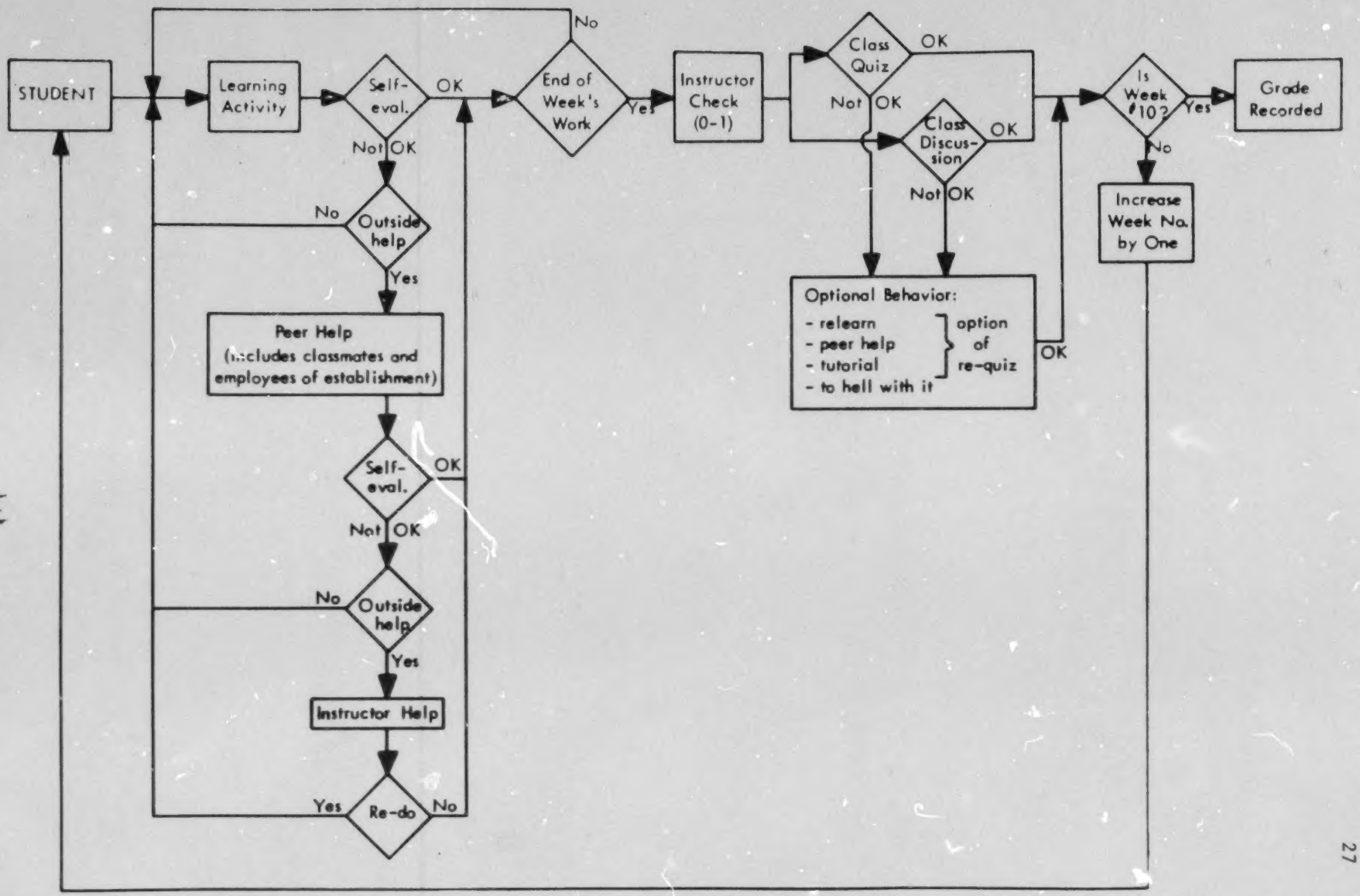
is always to ignore the failure and this option, whether we like it or not, is also available. After the class quiz, class discussion occurs, and it should be noted that the class discussion is an evaluative device as well as a learning experience. Both the student and the instructor can evaluate the student's ability to participate in the discussion and his or her level of understanding. Once again, optional behaviors are available in the event that comprehension is not satisfactory.

As each week progresses, the subject matter shifts and so at the end of a ten-lesson process the course is completed. These learning experiences are summarized in systemic fashion in Figure 1.

Curriculum Design

The curriculum designed for the Hotel and Food Service degree is planned to encompass the knowledge base of the supervisor and middle managers in the hospitality industry and consciously address the issues of preparing "knowledge workers" rather than "skilled workers." Skill learning is, in some cases, a part of that knowledge base but that skill learning is undertaken jointly with relevant cognitive learning objectives, in an integrative fashion.

As the design for the curriculum emerged, the freshman year reflected the traditional academic model of classroom instruction. The seminar-practicums occur in the second year. In the first term, the first of the seminar-practicums is offered. It concerns itself with food production, the knowledge base of the skilled worker whom the student will be working with, and some day supervising.



Model: DIAGRAM OF STUDENT BEHAVIOR PROCESS

FIGURE 1

The second course concerns itself with such high-level supervisory and management routines as purchasing, food cost control, payroll control, pre-costing, and scheduling.

The third seminar-practicum is an integrative experience intended to draw together all the professional courses in the curriculum. As such, it is a non-computer simulation of a food service establishment based on a series of inter-related decisions.[7]

Figure 2 presents a conceptualization of the curriculum as it relates to specific competencies and the knowledge base. An outline of the curriculum and a typical student's program are presented in Figures 3 and 4.

The Seminar-Practicum and the Problems of Hospitality Education

To this point, I have presented the neat and orderly process of the seminar-practicum. I need hardly tell experienced educators that this is not where we began and is, rather, a description of where we are at midpoint in the development and testing of the instructional system. The system was initially developed in response to needs for change which are typical of the expanding field of hospitality education. In responding to these needs for change, an instructional system has been developed that not only solved the problems initially perceived but also provided an improved vehicle of instruction in a number of areas. As evidence of the conviction that this is an improved system of instruction, I can say that we are in the process of adapting

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[7] Thomas F. Powers, "A Systems Approach to Hospitality Education" Proceedings, Council on Hotel, Restaurant, and Institutional Education. December 28, 1970.

FIGURE 2

THE CURRICULUM AND THE IDENTIFIED KNOWLEDGE BASE

KNOWLEDGE BASE	related to COURSE CONTENT	COURSE* NUMBERS	CREDITS	
Interpersonal Competence				
Communication	Written Communication	Eng 1, 3, or 800	6	
	Oral Communication	Spch 200	3	
				9
Behavioral Sciences	Sociology	Soc 1	3	
	Psychology	Psy 2	3	
	Economics	Econ. 14	3	
	Personnel Management	HFS 805	3	
				12
Administrative Competence				
Management Process	Introduction to Management	FSHA 102		3
Information Systems	Introductory Accounting	Acctg 102	3	
	Foods Service Cost Accounting	FSHA 225	3	
				6
Environmental Control	Hospitality Industry Equipment & Utilities	FSHA 320	3	
	Hospitality Industry Maintenance	FSHA 321	2	
				5
Management Planning	Food Production Systems	HFS 860	4	
	Food & Beverage Administration	HFS 870	4	
	Hotel & Food Service Merchandising	HFS 804	3	
				11
Comprehension of Physical Phenomena				
	Food Production	HFS 850	4	
	Sanitation	HFS 802	3	
	Biological Science	Bi. Sci. 1	3	
	Nutrition	Nutr. 150	2	
				12
Elective and Miscellaneous				10
				68

*These courses represent an example for a typical student and not necessarily the precise set of courses for all students

FIGURE 3

ASSOCIATE DEGREE IN HOTEL AND FOOD SERVICE

I.	General Education Requirements	
	A. Communication Skills	9
	6 credits in English, Speech 200	
	B. Arts, Humanities, Social and Behavioral Sciences	12
	At least 3 credits in Economics	
	C. Physical Education	2
		23
II.	Requirements for the Major	
	A. General	15
	FSHA 50, 225; HFS 850, 860; 3 credits in Acctg.	
	B. Specialization	30
	Students may select an emphasis in Hospitality Administration or Health Facilities Food Service Management	

FIGURE 4

EMPHASIS IN HOSPITALITY ADMINISTRATION[1]

1st Term

Engl 800 or Engl 1	3
Psy 2, Psychology	3
FSHA 102, Introduction to Food Service & Housing Administration	3
Nutr 150, Elementary Nutrition	2
	11

2nd Term

Engl 1 or Engl 3	3
Spch 200, Effective Speech	3
HFS 805, Training and Supervision	3
Acctg 801, 16, or 101	3
	12

3rd Term

Soc 1, Introductory Sociology	3
FSHA 225, Food and Labor Management and Control	3
Art H 100, Introduction to Art	3
HFS 802, Housekeeping and Sanitation	3
	12

4th Term

Econ 14, Principles of Economics	3
HFS 850, Food Production Problems[2]	4
FSHA 320, Hospitality Industry Equipment & Utilities	3
	10

5th Term

FSHA 321, Hospitality Industry Maintenance	2
Bi Sc 1, Structure and Function of Organisms	3
HFS 860, Food Production Systems[2]	4
Ph Ed 1 or 25, Health and Physical Education	1
	10

6th Term

HFS 870 Food & Beverage Administration[2]	4
HFS 804, Hotel and Food Service Merchandising	3
Free Elective	4
Ph Ed 1 or 25, Health and Physical Education	1
	12

Summer

FSHA 50,[3] In-Service Training 1

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[1]This is an example for a typical student and is not the program for all students electing this emphasis.

[2]Seminar-Practicum

[3]Requires professional experience which may be gained on a full-time basis during the summer or as a part-time worker during the first three terms.

the system developed for the associate degree to a number of the courses presently taught in a more traditional fashion in our larger baccalaureate degree program.

The Hotel and Food Service program had traditionally been housed at the main campus of the University at University Park. The baccalaureate faculty all taught portions of the associate degree curriculum and the laboratory facilities were shared by both programs.

In a university with a system of 21 commonwealth campuses, it seemed obvious that there was a need to offer the associate degree on a number of campuses rather than on one rather remote campus in the center of the state, already overcrowded with baccalaureate and graduate students. The transfer of the associate degree program, however, created two major problems.

The first of these is a common problem experienced by most associate degree programs in hospitality education--that of faculty load. The hospitality education curriculum covers avery broad spectrum of courses, and in an expanding field of education, there is a high degree of faculty turnover. Consequently new faculty are constantly being brought in, often with limited teaching experience and sometimes with preparation to teach that is heavy in one area, but somewhat thinner in other areas. This led to the recognition of the need for a substantial element of pre-design in all the courses.

A second problem is the cost of the traditional laboratory course. The laboratory in use at University Park has equipment valued at $85,000 and commits one whole floor of one wing of a large building to a single purpose use. A financial and resource commitment like this was clearly not possible on several additional campuses, and indeed,

the large capital investment required for a traditional foods laboratory poses problems to many community colleges who would like to establish a curriculum in hospitality education.

Teaching traditional foods labs is also time consuming in the extreme of faculty time, adding further to the load difficulties cited above. The teaching of a traditional foods lab generally includes all the problems of running a small scale restaurant along with all the problems of running a laboratory course.

Skill Learning

Project staff early on determined it would be necessary to separate the psychomotor learning particularly associated with the food production course from the cognitive learning of the modules if we wished to demand that certain skills be mastered. Accordingly, a list of 75 psychomotor skills was developed which the student was to master in the course of the 36-week period. Since the employer commits to move the student through a variety of stations, at some point during the course of the student's year in the field, it is expected that he will find the opportunity to master these skills. A "skills sign-off sheet" was developed. The student must indicate on that sheet which skills he feels he has learned and his supervisor on the job must likewise indicate that he is satisfied that the student has mastered that skill. In the case of particularly important skills, the student must demonstrate the skill to the instructor when the instructor visits his place of employment (or in a classroom setting) and the instructor also "signs off" on those skills. The student is required to master at least 25 skills each term until he has completed all 75 skills.

It should be noted that the Hotel and Food Service degree is principally intended to prepare knowledge workers for supervisory and middle management roles and not to prepare skilled workers for work in the kitchen, although the entry point for many students graduating from such a program could well be at the skilled level. Accordingly, it is intended that the student become familiar with and master as much as possible of the knowledge base of the skilled worker he will be working with but the principal focus of the curriculum is not on psychomotor skills but rather on the knowledge base required of a manager.

Developmental Time Frame

A first and difficult parameter that was accepted in embarking on the design of this system was that of time. On the one hand, it was clear that we could not instantaneously create the desired system because the instructional materials did not exist in the desired form and in many cases (particularly in the supervisory and food service management subject matter domains) did not exist at all. We, therefore, accepted a three- to four-year time frame as our developmental universe but, at the same time, as soon as the commitment to testing the system was made, we accepted a series of very harsh deadlines. The University's decision to move the curriculum to a Commonwealth Campus meant that the instructional system had to be ready to deal with second-year students in seminar-practicums one year from the start of the new program. As the project got underway, the tactic of working with inflexible deadlines was developed. On September 1 of year two, a course would be taught and the materials for that course must be

ready. Similarly on January 1 and in early April, a second and third course were required.[8] These constraints dictated an adherence to deadlines and forced us to accept first drafts which might have some weaknesses in them. We felt that these weaknesses in the learning experience for the test group of students would be more than balanced by the additional attention given to students in an experimental group; the fact that an outstanding faculty member was made available to work with them; and, that the total system design was flexible enough to permit the instructor to work around difficulties as they were encountered. By moving the materials quickly into a test year, we have been able to proceed to final revision of the self-instructional modules, based on detailed class testing.

It should be noted that an integral part of the project's long term commitment was to submit project results to professional evaluation. Accordingly, development, administration and evaluating of vocational commitment and achievement instruments were viewed as being of high priority. The feedback these tests have provided us have been useful in over all project evaluation and crucially important as we now enter the module revision stage of our work.

Implications for Related Fields

The implications the instructional system for related fields

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[8] It should be noted that the deadlines accepted for module development would have been impossible of achievement had we not been able to build on earlier work done under an innovative Home Economist, Mattie Waymer, in Morris Brown College's Food Production Management Program.

immediately became clear. Working within the same curricular framework, an associate degree program was developed for dietary technicians and this program, also based on the seminar-practicum, was presented to the Bureau of Health Manpower Education of the Public Health Service and a proposal was funded to develop similar instructional materials and to offer an experimental associate degree program at the York Campus of The Pennsylvania State University for dietary technicians. (This program has just finished its second year, and the seminar-practicum, with self-instructional modules specially developed for health care food service supervisors and managers have been successfully tested.)

As self-instructional modules are developed for courses of this kind, the clear base for the development of an external degree was established. Once again, the Public Health Service responded and provided funds to redevelop the self-instructional modules for a multi-media delivery system and to develop the other, professionally oriented courses for multi-media delivery. By the end of the current calendar year, courses will be developed which will provide for the delivery of the technical courses for the first year of the dietary technician curriculum through independent study by correspondence.

Conclusion

The para-professional, the knowledge worker, responds to vital manpower needs. The seminar-practicum makes possible the wider offering of appropriate courses by reducing the cost of instruction while also improving the quality of that instruction. It is hoped, too, that the instructional system will appeal to students who might not otherwise be able to afford to study because the student in a seminar-practicum

is a paid employee as a part of his work experience.

The final point that needs to be made, however, is that this paid employment is not solely an economic vehicle for financing the student's employment--nor is it even principally an economic vehicle. Rather it is a cultural tool which brings the student into the world of work as a productive adult, socializing him or her to productive adult roles. At the same time that the knowledge base is secured through academic courses, the students are prepared for the transition from the world of the classroom to the world of work in which they expect to spend much of the rest of their lives. In many respects, the cultural learning is as important and in some cases even more important than the subject matter learning. Fortunately preliminary testing and the subjective evaluation of both students and faculty indicate that the seminar-practicum is effective not only in the area of student acculturation but also in the imparting of specific cognitive knowledge.

III

THE DEVELOPMENT OF SELF-INSTRUCTIONAL MODULES FOR HOSPITALITY EDUCATION

by

Suellen Wayda, M.S.

THE DEVELOPMENT OF SELF-INSTRUCTIONAL MODULES FOR HOSPITALITY EDUCATION

Suellen Wayda, M.S.
Research Assistant
Food Service and Housing Administration
The Pennsylvania State University

I intend to discuss my experience with the development of the self-instructional modules which now lead to The Pennsylvania State University's two-year associate degree in hospitality education.[1] But I want to warn against any illusions of simplicity: During those times where I make myself sound unusually systematic, I was generally swamped the deepest in trial and error.

Most educators are thoroughly familiar with the traditional concept of the correspondence course. So I also intend, here at the beginning, to differentiate between instruction by correspondence and education through the self-instructional learning module.

The self-instructional module, as we have developed it in Penn State's Department of Food Service and Housing Administration, complements and reinforces those experiences our students gather within the seminar and the practicum phases of their curriculum. And so, by necessity, the self-instructional module not only <u>looks</u> different from the text of the traditional correspondence course, but it also <u>operates</u> in a different fashion.

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[1]This article has been adapted from a paper delivered before the American Home Economics Association's 64th Annual Meeting, Atlantic City, New Jersey, June 27, 1973.

Four basic purposes have directed our production of the self-instructional learning modules:

First, We have designed them to communicate cognitive information--like a traditional text or correspondence course;

Second, We use them to encourage our students to evaluate those food service operations in which they find themselves employed according to standards posited by the cognitive material;

Third, We provide batteries of self-reinforcing questions, quizzes, and behavioral objectives so that our students may continually evaluate their own progress within the accompanying seminar context; and

Fourth, We see that the modules provide a realistic set of standards against which our students can measure the operation of their own food service establishment (their practicum setting) during those weekly class seminars.

In short, we try to build in a basis for fruitful seminar discussion as well as thorough and objective student evaluation.

From the moment that work began on the first food service self-instructional learning module at Penn State, it was apparent that the variety of information we wanted to include would absolutely preclude the use of a traditional textbook.

I also perceived that my educational background, primarily in the field of educational systems and theory, ill-equipped me to deal with the more specific and pragmatic knowledge base in hospitality education.

Thus I began to rely shamelessly--and continued to rely heavily--upon the expertise of my FSHA colleagues conversant with this knowledge base. I also sought out library resources and several obliging scholars in other departments across campus.

We began by identifying a reasonably complete array of behavioristic goals and learning objectives which we believed appropriate for student achievement with our module approach. Penn State's laboratory courses in the food service department facilitated this initial step: They have operated for years with learning objectives oriented specifically toward the traditional laboratory approach.

The results of this preliminary study revealed that the behavioristic goals of our program could be categorized most conveniently into one of three goal levels:

1. the knowledge and skills required by food production workers;
2. the knowledge and skills required by supervisory personnel; and
3. the knowledge and skills required by the higher levels of food service management.

The lines of demarcation between the levels are not clearly identifiable. In fact, one can say that the food service knowledge base is more cumulative in nature than rigorously sequential. But this breakdown proved useful to us because each level lent itself to a convenient ten-week term, and taken altogether, the three categories represented a full year of academic work. Best of all, the courses are mutually reinforcing. ("Constructive redundancy" we sometimes call

it.) In the real life setting, they produce a manager who can step in at practically any echelon of an operation if the need arose.

Arranging the material according to these three levels or categories, solved many problems, but by no means all of them. We now had a general framework into which we could place those specific tasks we had tentatively determined that each learning module should produce. In a symbiotic relationship to the tasks that our students had to master, each respective knowledge base implied cognitive information which the modules had to provide.

The design of our learning modules, then, followed naturally from the specific concepts indigenous to each of the three levels we had already isolated. More specifically, for example, those tasks appropriate to the food production worker were listed as completely as possible at the outset. Using the government's Dictionary of Occupation Titles (DOT) job names and descriptions to identify all kitchen workers, a list of tasks for each job was prepared. The listing further indicated which tasks might be performed by more than one worker.

Subsequently, students, instructors, and researchers in our department performed a detailed task analysis for each activity on my list. From this collection of task analyses, a set of specific cognitive facts and psychomotor skills to accompany each task was composed.

At this point, my problems grew rather more complex. I discovered that it is one thing simply to rewrite or up-date existing textual materials in accordance with a cognitive base. But it is quite another thing to design a written pedagogical system that transmits both cognitive and psychomotor skill information.

I had grown accustomed to using the American Home Economics Association's Home Economics Learning Package (the acronyn is HELP) developed by Drs. Twyla Shear and Elizabeth Ray. I went first to Dr. Shear, who serves as one of our project consultants. She suggested that due to the need to inculcate both skills and knowledge, we did indeed require an altogether new and different format. Dr. Shear advised that we replace the segment of existing reading materials which the HELP format utilizes with our own original written materials.

This change in format helped tremendously, but part of the problem remained: What kind of learning system would accommodate both the demands of the seminar and the necessity to integrate the practicum experience?

At this point, we contacted Dr. Robert Mager, another of our consultants and an expert in the field of instructional systems. He saw that our module-seminar-practicum format cried out for a self-instructional system that provided information on the <u>how</u> as well as the <u>why</u> tasks are performed. For example, in addition to learning why they must study fish cookery, our students should know by the end of their course work how to cook fish. Dr. Mager further suggested that we could treatly diminish the actual job of writing the self-instructional modules by disconnecting the <u>cognitive</u> from the <u>psychomotor</u> and dealing with each facet separately.

We decided that we would have to identify the substantive cognitive material and present it in a textual format. This material would be accompanied, in each module, by a section that required the student to learn and apply the psychomotor skills appropriate for that

module. But first, we saw that we would have to break those psychomotor skills into their component parts.

My detailed analysis of the tasks performed by food production workers, food supervisors, and higher level management personnel had revealed an inverse relationship between the job's inherent managerial responsibility and the number of psychomotor skills actually required by the job. I returned, then, to one of my original concerns: To quantify and arrange logically those psychomotor skills a student would have to perform to prove his competency at the first course level--as a food production worker.

Having collected that set of indispensible psychomotor skills, we established performance criteria for each skill, so that our students could evaluate their own proficiency.

The determination of these performance criteria proved to be both tedious and unusually difficult. It might seem logical to have decided which procedures would constitute a superior performance of any one skill by (first) observing a person who had obviously mastered the skill; (second) by noting his steps chronologically as he performed them; and (third) by setting boundaries on how much deviation would be acceptable or permissible.

[illegible] already there are problems attendant upon such a procedure: In a job as individualized (not to say idiosyncratic) as a chef's, for example, each expert masters a set of skills and then adds various personal touches. Some skills are functional, some are from habit, and some are pure showmanship. Additionally, numerous food production tasks can be carried out in a variety of efficient ways. It would

simply not be humanly possible to formulate performance criteria for all the acceptable variants on a single task.

Therefore, as I recorded performance criteria, I found it necessary to leave a great deal of leeway in some areas, to leave some filigree procedures of doubtful efficacy unwritten, and to exercise some arbitrariness in areas where a wide variety of acceptable procedures exist. An example might be the preparation of pasta products. Because of the variety of methods used by individuals even to determine the doneness of pasta, it was necessary for me to state the preferred methods but that other methods might be employed at the discretion of the cook. The result of this effort was a list of some seventy basic psychomotor skills (Appendix A) and descriptive criteria for each of them.

Now before I proceed any further with my explanation of Penn State's FSHA self-instructional learning module system, I want to pause briefly to review where I stood at this phase of the project:

First, Our students would participate in a part-time work experience throughout each of three ten-week academic terms. During each term, the students would enroll in one of the three courses which would cover their work experience from the academic point of view and would ascend in their managerial expertise emphasis and descend in their food production worker skills emphasis. Each course would consist of a weekly seminar and a written text to accompany both the seminar and the work experience.

Second, During their first term of seminar-practicum our students would acquaint themselves with the food production worker's role. The second term would introduce them to the role of the food service supervisor. The third term would focus on the higher managerial tasks and decision-making responsibilities.

Third, To simplify the presentation of information for our students, we had decided to use a dual approach. We listed materials that required cognitive information separately from material demanding psychomotor skill performances. We had determined both the appropriate information and the skill requirements by conducting analyses of the jobs performed by persons employed at each of the three vocational levels.

Once we hit upon this general orientation of the seminar-practicum system, the objectives of the self-instructional modules within the three courses became clear. I would write a separate module for every week that our students had a seminar. Each of the three courses, then, would contain ten modules. During the week prior to his seminar, a student would read the module and complete whatever learning activities it prescribed. At the time of the seminar, he would be quizzed about the information presented in the module assigned for that week.

Now additional problems emerged as we attempted to divide the cognitive information and the psychomotor skills into meaningful

modules. Recognizing that Dr. Mager had been right to suggest that they be separated, we perceived the need to present both segments to our students systematically--and in such a way that both the cognitive information and the job skills would be reinforced by the practicum experience.

This problem was attacked with the kind of reasoning that follows: The practicum had been designed to provide on-the-job training and the sort of work experience that might not occur within our traditional Penn State food service laboratory setting. Also, the seminar had been designed to guide our students intellectually--to give them the opportunity to discuss the practices and problems they encountered at work and to learn from them. More specifically, the seminar period could be used to compare the theoretical information presented in the modules with the more practical applications of this information as they arose in the work setting. But the learning modules, in turn, had been designed to provide the student with theoretical information--the way "things should be done"--and the principal problem here, as I saw it, was that an entire week of potential intellectual learning seemed to be going by the boards. A meaningful comparison between theory and practice was getting deferred until a two-hour period buried at the end of every seven days.

Mulling over our learning objectives and the relationships among the three segments, we finally realized what was missing. The self-instructional modules were intended to act as vehicles for communicating information assembled by our task analyses, but no continual feedback mechanism (if you will) within those modules had

been provided for the practicum experience! Without a way that related constantly the practicum experience to the theoretical information, the chances that our student would recognize the theoretical concepts within their practical, operational setting vastly diminished. Accordingly, the potential effectiveness of our entire instructional system was being limited.

Having identified the central problem, we had to redesign the self-instructional modules so as to establish an obvious, pedagogically fruitful nexus between the content of the modules and the practicum experience and then, somehow, to dramatize that nexus. The answer to this concern could be in the mechanics or in the mode of communication of the self-instructional modules.

The result of this concern was the formulation of a new learning system which I called, "The Ideal Pedagogical System" (referred to by its acronym, TIPS). The TIPS model provided that necessary connection between theory and practice. Let me digress for just a moment to describe it a little more carefully.

TIPS is an instructional system that encompasses all the steps I've already narrated: it lists behavioral objectives for our students; it provides cognitive information; it asks questions about the information; and it identifies and describes the skills a student must learn. Specifically for this project, it places all of these facets within a fictitious, ideally operated restaurant.

This "ideal restaurant" feature had been the missing link between theory and practice. Its incorporation provided a genuinely valuable, realistic method for dramatizing how theory looks

operationally within an actual food service setting.

The TIPS instructional model introduced a restaurant (we called it The Bar HFS) which in our opinion was sufficiently complex to cover most of the problems our students would encounter in their practicums and yet so well organized that its operations could easily be identified and analyzed.

The success of the TIPS concept relied upon a detailed description of the way The Bar HFS applied the cognitive information we presented our students in the module. If, for example, the module for the week dealt with vegetable cookery, the TIPS section described vegetable preparation at The Bar HFS. Meanwhile our students had been observing daily how their facilities prepared vegetables. Moreover, our TIPS section showed the layout of the vegetable station and the equipment involved; and it identified the various workers and their vegetable tasks from purchase to peelings. This approach provided our students with a frame of reference for analyzing the operations in their places of employment, and it provided in turn a great deal of ammunition for the weekly seminar discussions. In fact, the tension between the ideal and the actual seems to have stimulated the learning process particularly well.

One additional advantage the TIPS concept offered was that it helped me identify even more easily the specific material to include in each module. Since The Bar HFS restaurant provided a model against food production course station by station--one module would deal with salad-making, another with desserts, a third with vegetable cookery, and so forth until I had traced all the food production stations

through the kitchen. With some alternations and adaptations, this same approach also proved useful in the supervisory and even the middle-management courses that followed.

I have expressed personal pride in the TIPS concept and have emphasized my own role in its development. However, the full panoply of services were made available to me by my department. I remained in constant contact with department personnel, colleagues, consultants, and friends too numerous to credit individually. I was, after all, only a home economics education graduate verging then on a Masters Degree, and I could not have contributed the TIPS model without guidance and input provided by our department's experts in hotel food service, hospital food service, dietetics, marketing, and all other operational phases of industry not to mention the assistance of other researchers and technical writers.

While I don't contend that the TIPS concept, or even our general approach to self-instructional module learning at Penn State, could supplant all the traditional forms of instruction, I do think our system could facilitate the teaching of a wide variety of home economics subject matter conducive to the seminar-practicum format.

We have found that when our students can compare a pragmatic but ideal operation with their own workplace, they progress quicker and easier through the cognitive domain and arrive at a point where they not only understand food service but also evaluate it adroitly.

Rhetorical questions can be dangerous; nevertheless, I would ask, who knows of an instructional system better than one that provides on-the-job training, a lively academic context, and a genuine inducement for its students to develop the capacity to think critically?

Appendix

SKILL SIGN-OFF SHEET

Student Name _____

Establishment where employed _____

Immediate Supervisor _____

SKILL NAME	Student's Date of Completion	Supervisor's Initials	DATE	*Instructor's Initials	DATE
Before completing any skill, refer to the detailed description of these skills that accompanies the HFS 850 test.					
1.A.* Setting up operating a dish machine					
1.B.* Cleaning and closing up a dish machine					
2. Cleaning a grill					
3. Cleaning a trunnion or steam kettle					
4. Cleaning broiler grids					
5.* Cleaning out a deep fat fryer					
6.* Setting up a deep fat fryer					
7.* Running a deep fat fryer					
8.* Straining fat in a deep fat fryer					
9. Peeling potatoes					
10.* Using a French knife (2 methods)					

SKILL NAME	Student's Date of Completion	Supervisor's Initials	DATE	*Instructor's Initials	DATE
13. Operating an automatic potato peeler					
14. Coring an apple (2) methods					
15. Removing core from head lettuce (2) methods					
16. Preparing fresh fruit sald from scratch					
17. Cleaning salad greens					
18. Storing salad ingredients					
19. Preparing tossed green salad					
20. Making salad bases					
21. Preparing a salad garnish					
22. Preparing and unmolding gelatin salads					
23. *Adjusting heat in trunnion or steam kettle to SIMMER contents					
24. Preparing hot cereal					
25. Preparing any food item that uses starch as a thickener					
26. Preparing a pasta product					

SKILL NAME	Student's Date of Completion	Supervisor's Initials	DATE	*Instructor's Initials	DATE
27. *Using a wire whip to stir and blend					
28. *Using a ladle					
29. Preparing a Hollandaise sauce					
30. Making a slurry					
31. Making a roux					
32. Thickening gravies or stews					
33. Whipping egg whites					
34. Preparing a custard					
35. Preparing a cooked fruit dessert					
36. Making a dessert					
37. Making a dessert topping or sauce					
38. *Slicing a pie					
39. Portioning a cake (2 methods)					
40. *Using a scoop					
41. Cracking an egg without breaking the yolk					
42. Separating an egg white from egg yolk					
43. Scrambling an egg					

SKILL NAME	Student's Date of Completion	Supervisor's Initials	DATE	*Instructor's Initials	DATE
44. Frying an egg					
45. Poaching an egg					
46. Making an omelet					
47. Making pancakes					
48. Treating a frying pan					
49. *Using automatic slicer					
50. Spreading butter or mayonnaise					
51. Grilling a sandwich					
52. Slicing a sandwich					
53. Using an automatic chopper-grinder					
54. Portioning solid sandwich fillings					
55. *Portioning salad-type sandwich fillings					
56.**Carving a rib roast					
57.**Carving a rolled roast					
58. *Sharpening knives with steel					

SKILL NAME	Student's Date of Completion	Supervisor's Initials	DATE	*Instructor's Initials	DATE
59. *Determining doneness of a roast using meat thermometer					
60. Skinning a tenderloin					
61. Boning a roast					
63. Cutting a pocket in a pork chop					
64. Turning meat on the broiler					
65. Scoring fat before broiling					
66. Adjusting the broiler					
67. Boning chicken breasts					
68. *Cutting whole chicken into parts					
69. Determining doneness of a turkey					
70. Testing doneness of fish					
71. *Portioning fish (raw or cooked)					
72. Cleaning a whole fish					
73. Cleaning shrimp					

* These are CRITICAL skills that you may be called upon to perform for the University instructor in addition to the establishment supervisor.

** You are responsible for either SKILL #56 or SKILL #57; Note that these are CRITICAL.

IV

APPLICATION OF A SELF-INSTRUCTIONAL SYSTEM FOR PARA-PROFESSIONAL EDUCATION IN HOME ECONOMICS

by

James B. Hicks, M.S.

APPLICATION OF A SELF-INSTRUCTIONAL SYSTEM FOR PARA-PROFESSIONAL EDUCATION IN HOME ECONOMICS

James B. Hicks, M.S.
Assistant Professor
Hospitality Administration
The Pennsylvania State University

Introduction

Junior colleges, community colleges, and those institutions that have begun to offer the Associate Degree are coming into their own as powerful forces in higher education.[1] And part of their recent success lies in the fact they have been fashioning courses for the student Peter Drucker refers to as "the knowledge worker,"[2] the person we all once called "the middle-manager."

Dr. Sidney W. Brossman, Chancellor of the 96-member Community College System of California remarks that "our education system may finally be catching up with our students."[3] What Dr. Brossman means is that colleges like the ones he directs have begun to provide their live-at-home, work-while-studying students with the knowledge base for specific careers. And for that "knowledge worker," this kind of education translates into an efficient, low cost means of achieving

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[1]This article has been adapted from an address before the American Home Economics Association's 64th annual meeting, Atlantic City, New Jersey, June 27, 1973.

[2]Peter F. Drucker, The Age of Discontinuity, New York: Harper & Row; 1968, p. 264.

[3]Peterson, John, "Career Aims Shake Up Community- College Courses," The National Observer, April 7, 1973.

upward mobility in the labor market.

At The Pennsylvania State University, the Department of Food Service and Housing Administration has spent three years developing an instructional system designed to meet both the specific needs of today's work-while-studying students and the general manpower needs of the hospitality industry. This instructional system is called a "seminar-practicum" because of its heavy reliance upon an innovative, controlled, field-learning experience.

Of course, field experiences, work-study programs, summer practicums, and simulation laboratories have long been recognized as valuable ways to let students glimpse practical applications of their pedagogical knowledge. Unfortunately, the traditional field experience is, as you know, relatively uncontrolled. As a result, while he may faithfully report what he saw or did, the student too often finds himself unable to reapply what he learned. In effect, he does not really know what he knows. He fails to reach what Schein and Bennis have called "meta-goals,"[4] that is the learning, in addition to content, about how to approach and solve problems outside the classroom. More simply put, field experience meta-goals involve learning how to learn from experience. In the traditional foods laboratory, for example, a student learns to use the instructor or text as his only source of information. In the seminar-practicum he learns to use his peers in the seminar sessions; he observes and interrogates fellow workers and supervisors on the job; and he employs his own resourcefulness to solve problems.

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[4]Schein, E. & Bennis, W. Personal and Orgational Growth Through The Laboratory Method. New York; Wiley, 1965.

In an effort to improve the field experience, The Penn State Food Service and Housing Administration Department developed a three-part system to provide a variety of learning opportunities for our Associate Degree students. The first part of the system is the required work experience--15 hours per week in a hospitality operation. Second, the student's learning experiences on the job are directed through the use of self-instructional modules, which present information on a single topic each week, elicit information, and evaluations of the appropriate work experiences from the student, and test his knowledge. Third, the student is guided in conceptualizing and verbalizing problems encountered in the week's lessons in a 3 1/2-hour seminar held weekly. This seminar provides the instructor with an opportunity to clarify the information within the module. But more important, it provides a time (1) for an evaluative and comparative discussion of theory versus practice, "my operation" versus "your operation," and (2) for the recognition and resolution of conflicts that might not normally reveal themselves until after graduation--when an intellectual forum like ours would no longer be available.

In the Fall of 1971, Penn State's Department of Food Service and Housing Administration implemented its first seminar-practicum on the Berks County Campus. The Berks Campus is located in Reading, Pennsylvania, a city of 85,000 that lies 60 miles west of Philadelphia. The Reading area boasts a wide variety of hospitality operations linked by a strong local restaurant association.

The role of instruction within the system turned out to be rather more complicated than that of the traditional college teacher. It

required, in fact, elements of the public relations man, the encounter group leader, the advisor and mentor, and the confidence builder. Moreover, the instructor played these variegated roles both for the students, on the one hand, and for their potential employers around Reading, on the other. And at times it seemed, during the first year of the program, that the organizational and public relations aspects took precedence.

Year One

During this time, the involvement and cooperation of the owners, operators, and administrators of local hospitality businesses and the restaurant association was enlisted. The first step was to obtain the support of a small group of influential operators in the area. Through this group, meetings were arranged with other restaurant, hotel, motel, school lunch, hospital and college feeding administrators to present and describe the system, seek advice, and gain commitments to hire students during the second (practicum) year.

It was not difficult to achieve industry acceptance and involvement, though food service operators approved the program for different reasons. Those who had formal educational backgrounds themselves were more inclined to be interested in the program for its long range benefits to the industry. They wanted to know the answers to such questions as: How many students could the program handle? How many students would come from this community? Where would they be finding jobs? And what kind of work would they be qualified for when they completed their program? This group also tended to show interest in the course content, some helped evaluate the learning packets during

their development.

All operators and managers were interested in the short-run benefits of employing highly motivated, dependable student workers during their practicum year. The food service industry traditionally draws many of its entry level workers from that portion of the labor market made up of transient workers, part-time workers, and moonlighters. The thought that they could employ just one dependable and enthusiastic swing man or relief worker involved in the seminar-practicum had attractions they recognized immediately.

In addition to individual and small group meetings with food service operators, the instructor became an active member of the Local Restaurant Association. Several formal presentations were made to this group during the year to inform members of progress and new developments in the program. Informal contacts for students were also provided by taking one or two students to each of the monthly meetings. This not only helped give the operators a chance to meet possible employees for the following year, but also helped publicize the program further.

At the end of the first year, the instructor prepared a list of interested employers including all categories of hospitality operations, and offered it to the students during the Spring Term of their first year at The Berks Campus. The students took responsibility for contacting the employers, arranging interviews, and gaining the best wages, hours, and working conditions they could. From the very beginning, in other words, our students faced personal responsibility, gained a little job hunting experience, and acquired a psychological "stake" in the program. All of this would stand them in good stead.

Year Two

It was not until the Fall of their second year that the students themselves really became involved in the innovative part of the program. Together, the students and the instructor arranged for the weekly seminar to meet for 2 1/2 hours at a time that would conflict with neither their regular courses (the students carried between six and eight additional credits while involved in the seminar-practicum), nor their work schedules.

During the first seminar meeting, the instructor distributed the collection of modules prepared by Penn State's Food Service Department for its food production course, and he explained the system as carefully--and with as much detail--as he could. He tried to emphasize the innovative, precedent-setting, futuristic nature of the instructional system--as well as the spirit of group exploration and camaraderie. He also stressed the need for group interaction, discussion, and critical thinking. Eschewing any authoritarian role, he deemphasized lectures and rote learning procedures.

The first seminar ended only after the instructor had made certain that each student understood what was expected of him in the first lesson or "module," and he had collected a record of each student's employer, immediate supervisor, and work schedule.

As part of his teaching duties, the instructor made weekly visits to the establishments employing students. Whenever possible, he visited an operation while the student was on duty. These visits provided an opportunity to check a student's activities and problems, confer with his supervisor, and perhaps check on the progress of his psychomotor skill development. The instructor devoted one day a week

to these visits, seeing each student or his supervisor at least three times in each ten-week term.

Reality

If all of the systems had worked exactly as planned, this would be the end of this introduction and one could simply follow this procedure outline. However, a number of problems arose, along with some serendipitous results that kept the implementation of the system exciting.

Getting the seminar practicum started. First, some of the students took easily to this kind of learning and some did not. After twelve years of the traditional passive-receptive model of education, most of the students experienced at least a little difficulty accepting an active role in their own educations. Generally, the students had expected a more traditional laboratory course in food preparation and were apprehensive and dismayed to find themselves suddenly thrust into the complex operational and social systems of a commercial kitchen. Only six of the twenty-two students had any more than one summer of experience in hospitality operations. Unsure of themselves, they were reluctant to engage in such appropriate meta-goal oriented behavior as asking questions of fellow workers and recognizing both their work environment and the "seminar sessions" as valid learning settings. At first when they came to the seminar, they did not participate freely and obten had made only the most superficial observations of their operations.

Of course, some of these orientation problems were natural, but more of them appeared than had been expected. The response has been

to start preparation for the seminar-practicum experience during the freshman year. Class assignments during this year have been designed to require more independent study, more involvement with local operators, and more group participation projects. Moreover, these Instructor's Guides also suggest some human relations and group interaction exercises that can be performed at the beginning of the first few seminar meetings to break down the barriers among the students. Getting Acquainted Triads, to facilitate the involvement of individuals in a newly-formed group; and Listening Triads, to help students understand the necessity of listening to each other with comprehension as opposed to merely hearing words, are examples of the exercises suggested.[5]

Instructor Anxiety. Anxiety was by no means limited to the students. Deprived of the support of a batch of notes and a blackboard, the instructor was as uncomfortable as the students and, in the early "lean" days of discussion, had to fight strong impulses to revert to the comfortable old chalk-talk lecture. The depression and doubts about the system began to melt away, however, when the students began to adjust to their new learning experience. By the second term, most students were so comfortable with the system that spontaneously and unanimously, they decided to extend the 2 1/2-hour sessions to 3 1/2 hours a week.

Class Size. Two other factors seemed to be important to the success of the seminar: session-class size, and the interpersonal

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[5]Human relations exercises were taken from three volumes of A Handbook of Structured Experiences for Human Relations Training by J. William Pfeiffer and John E. Jones, University Associates Press, Iowa.

relationship between the students and the instructor.

For various reasons, some student attrition did occur. Two students transferred to the baccalaureate degree program, four withdrew for personal reasons, and three were dropped for academic reasons. The result was a class size in the last term of 13 students. But as the seminars grew smaller, discussion became more effective for all those who remained. The students fell naturally into a circular seating arrangement, and the seminars became livelier and livelier. Twelve to 15 students seems to be the optimum size for a single session, with perhaps two separate seminar meetings for large groups, if the resources permit.

Interpersonal relations. The instructor also discovered during the second term that visits to the students work place were more important to the student, than he had supposed. The students working in remote operations were not visited at work as often as others in more convenient locations, and the quality of their assignments and seminar participation began to fall off considerably.

Interviews with these students revealed two significant factors. First, the students were still somewhat uncomfortable with the instructional system, and the instructor's failure to visit them in their establishments left them feeling like disinherited children. They tended to interpret the instructor's failure to visit them as an indication that he had decided to offer less of himself to them and to the program. Second, there seemed to be a correlation between the instructor's appearances at the workplaces and his ability to draw students out during the seminar. If they had already met informally

with him once or twice, the bond of confidence was established. On the other hand, if he had failed to visit them, they felt "left out" and were therefore hesitant to participate in the seminars.

Job Switching. Job switching as a common phenomenon, was one of the serendipitous outcomes of the program--more valuable than problematic. It had many causes and resulted in only three of the students staying with the same employer throughout the entire program. Job switching has the ring of failure, and at first the instructor was disappointed to discover it until the reasons for job switching became evident.

One cause was the practice of a few employers to take advantage of an exceptional student. Although employers were informed and had agreed that they would not schedule a student for more than 15 hours a week unless the student willingly agreed, some had students working as many as forty hours a week. If the student was unwilling to risk his position by demanding relief, I had to remove the student from the job and place him in another establishment.

Other students switched jobs in order to do the kind of work they wanted--waiter, cook, bartender--and others switched for better wages or to sample a variety of operations, for example, a fine dining establishment one term, a family-style restaurant the next.

While I had been initially apprehensive about job switching and hoped that a student would stay with the same employer throughout the three-term program, I discovered that the variety of work experience the students gathered by switching jobs enriched the seminar discussions immeasurably. I did not, however, permit a dismissal to go unrecorded:

a student can get fired only once; the second time he is dropped from the program.

Finally, there occured this one other bit of fortunate fallout: the acculturation from the world of the adolescent college student to the world of work.

Acculturation. In the process of administering "the seminar-practicum" Penn State found that the system serves an additional fundamental function, perhaps as valuable as the presentation of cognitive information. It acculturates the students. That is, it narrows the gap that ordinarily exists between the classroom and the world of work, and it allows the students to bridge that gap comfortably.

Roger Harrison and Richard L. Hopkins, writing in a recent issue of the Journal of Applied Behavioral Science, pointed rather forcefully to the inadequacies of the traditional university educational model in preparing students for cross-cultural experience. Their research delt specifically with Peace Corps volunteers who expressed dissatisfaction with their training. The volunteers were dissatisfied not with its cognitive content, but rather with the sense they had that their training experience "however interesting or well-prepared it may have been, simply did not prepare them for the total life they had to lead overseas."[6]

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[6]Harrison, Roger, and Hopkins, Richard L. The Design of Cross-Cultural Training: An Alternative to the University Model. The Journal of Applied Behavioral Science. Vol. 3 Number 4, 1967.

The analogy is apt. In a very real sense, the average college student must face a transition from his college environment to the world of work in much the same way those Peace Corps volunteers had to make the transition from Pittsburgh, Pennsylvania, to Thailand, or Columbia, or Ghana. And if anything, the problem is even more acute for Associate Degree students who are younger and often less mature at graduation than the baccalaureate student.

As a student progressed from employee skills and knowledge (in our 850 course) to supervisory knowledge and skills (our 860 course) through our managerial-level course (HFS 870), his ability to deal with the problems and pressures of a fast-paced, personally oriented industry like hospitality and food service improved demonstrably.

The achievement of "meta-goals" referred to earlier is part of this acculturation and occurred primarily in the second two terms of the seminar-practicum when students were studying Food Production Systems and Food Operations Systems. By this time, students had become more comfortable with the learning system, and much more information and critical analysis of their operation was required in weekly assignments.

As the terms went by, I found our students using their own resources to gather information more and more frequently; and I found them relying on their text materials and on me less and less. When I mentioned that they had begun to solve their own problems maturely in the forbidding "real world" setting, most of them would shrug it off as though maturity were the most natural thing in the world.

I am convinced, however, that our seminar-practicum students learning to bland emotions, values, and pragmatism in the highly complex human systems that exist within the hospitality and food service industries. I am convinced, in short, that our program succeeded.

Student Reaction. But how did the students themselves feel about the program? At the conclusion of the program I asked the students for their anonymous comments on the success of the Seminar-Practicum teaching method in reaching the specified objectives set forth in each lesson and the general goals and objectives which I had outlined to them at the beginning of the program. The students own words tell the story:

"I feel that through these courses and the work experience that went along with them that all of the objectives have been achieved. The working end of it provided for the accomplishment of most of them."

"I feel that seeing the application and non-application of theory in the eral world was most beneficial in this series."

"I feel that most of my objectives were reached through working in the field and learning by the mistakes made in the operation."

"Overall, I think I learned all the objectives that were defined throughout the course. I think the seminars were most beneficial in reaching these objectives."

"The OJT gave me more than any class did."

Conclusion

If the proof of the pudding is in the tasting, the proof of a new educational system is in its application.

I was fortunate to have a strong "supporting cast" of colleagues and an equally strong and enthusiastic industry organization to help get the "Seminar-Practicum" through its "shake-down cruise." I would not like to conclude, however, without noting the extraordinary effort on the part of the students themselves who had to endure the throes and uncertainty of such a radically new educational system. In spite of the many problems, they stuck with the program, contributed considerable feedback during impromptu "gripe" sessions from time to time, and made the system a success in spite of their anxieties.

For the students, there is considerably more to be learned from the seminar-practicum system than the cognitive knowledge and psychomotor skills outlined in the lesson objectives. These students and the classes to follow will be better prepared not only academically, but psychologically and socially for the work culture in which they will spend the rest of their lives.

V

A MODEL FOR EDUCATING SUPPORTIVE PERSONNEL: THE DIETETIC TECHNICIAN

by

Sara J. Clemen, R.D.

A MODEL FOR EDUCATING SUPPORTIVE PERSONNEL: THE DIETETIC TECHNICIAN

Sara J. Clemen, R. D.
Assistant Professor
Food Service and Housing Administration
The Pennsylvania State University

Education for supportive personnel in the field of dietetics has traditionally relied on in-house training, correspondence study, and conventional classroom instruction.[1] These methods of instruction have merit and deserve continued support, but they have grown less responsive to economic considerations in dietetic education and to the multitude of changes presently occurring in the health care field. The modern dietetic technician must fill the recent demands for administrative sophistication, function as an effective member of the health care team, apply pragmatic problem-solving techniques and skills to the operation of the physical health care system, and learn to apply the skills of a dietetic professional in preventive health care.

These requirements assume a knowledge base that allows the dietetic technician to assist in assessing a patient's nutritional status; to implement and then to evaluate various nutritional care programs; and to be involved in employee supervision, menu planning, supply purchasing, and other activities related to cost control and

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[1]This article appeared in the Journal of the American Dietetic Association for April, 1974, pp. 401-405. It has been adapted from a speech delivered at the ADA's annual meeting in Denver, October 23, 1973.

budget preparation.

To prepare dietetic technicians for delivery of effective nutrition care, the Food Service and Housing Administration Program, Pennsylvania State University, has designed an instructional system to meet the needs of the modern work-while-studying student on one hand and satisfy the educational requirements of the newly defined roles of the dietetic technician on the other. Such an educational system would achieve three major objectives.

Objectives

First, it would raise the dietetic technician to a competency level sufficient to allow her to function as a member of the health care team and to complement the dietitian effectively.

Second, it would provide a basis for close understanding and easy articulation among the three types of dietetic personnel--the dietetic assistant, the dietetic technician, and the dietitian--a situation that would encourage career accessibility and mobility.

Third, it would provide a realistic mechanism for applying the theoretical knowledge of the classroom and clinic within the problem-solving situations of the health care facility.

The formulation of an instructional system to meet these objectives required intensive preliminary planning and investigation. For example, the first objective--preparing competent dietetic supportive personnel--necessitated a careful identification of the knowledge of subject matter and the competency level needed for the technician to function effectively. To define the competencies the technician needs required, in turn, definition of the competencies of the dietetic assistant and

the dietitian. Then, the knowledge base identified was translated into a curriculum of specific courses planned to provide these competencies.

The second objective--providing the dietetic technician with a clearly identifiable and readily accessible career pathway--was easier to achieve than expected. Having identified in our preliminary planning stages the knowledge bases and the competency levels for each of the three dietetic professional roles, our principal task was to define the educational steps leading from the dietetic assistant level or dietetic technician level to that of the dietitian. To provide for career mobility, we realized that it was necessary to identify the areas of knowledge common to all three careers and then to expand or augment them to provide the competencies appropriate for advancing from one level to the next.

Philosophy

Career mobility and career education do not "just happen"; they must be careffuly planned. Without careful planning, the paraprofessional may encounter a seriously diluted curriculum and subsequently become a seriously deficient practitioner.

Fortunately, we were able to identify the knowledge base we needed and built on that base as we designed a curriculum for the two paraprofessional roles. For example, the knowledge base for the dietetic assistant includes recognized, standard principles of quantity food preparation. The dietetic technician needs to know not only these principles but also how to interpret them in terms of menu writing, employee scheduling, equipment utilization, and so forth. The dietitian

requires the knowledge of both the assistant and the technician and, in addition, cognitive information on (for example) how to design the initial quantity food production system. Thus planned pathways for career mobility can be built into the respective curricula.

Various authors and educators interested in this instructional approach have recently discussed career mobility as a means of meeting manpower needs and societal problems occasioned, in part, by the current emphasis on leisure. Meanwhile, dietetic professionals are expressing and demonstrating greater interest in dynamic career education and mobility in order to match their professional growth with that of the other health professions.

Spradley, for instance, suggests[2] that the goal for career education is "to enable every person to make informed choices as he develops his own career." Parnell supports[3] this view of career education by positing the theory that career education is the most logical mechnism for providing a student with the competencies that enable him "to cope successfully with life as a citizen, wage earner, and consumer. . .and to meet the basic human needs as defined by Maslow." In other words, education must begin to concentrate on real-life career roles and on the competencies a student needs to cope with them.

Bailey has addressed himself[4] to what he calls "lateral transfer"

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[2]Spradley, J. P., Career education in cultural perspective. In Essays on Career Education, Northwest Regional Educational Laboratory, April, 1973.

[3]Parnell, D., Career education and the school curriculum. In Essays on Career Education, Northwest Regional Educational Laboratory, April, 1973.

[4]Bailey, S. K., Career education and competency-based credentialism. In Essays on Career Education, Northwest Regional Educational Laboratory, April, 1973.

(academic movement and credit exchange between two- and four-year programs). He suggests that we become more liberal in our treatment of the lateral transfer and that we should not, in his words, "shackle opportunity and personal growth." He goes on to declare that if we do not make the provisions he suggests, we will be ignoring three basic realities of our contemporary world: (a) the need for education to assist in overcoming societal pathologies; (b) the need to encourage people to overcome "the boredom of push-button affluence and TV passivity"; and (c) the need to "cultivate occupationally, professionally, and phychically adaptive persons who can learn and relearn with relative ease as society continues its knowledge explosion."

Seminar-Practicum Educational Model

Our objective in developing an innovative instructional system to prepare competent dietetic technicians was based on this philosophy. This objective required that we design and implement a model of the educational system itself and provide an actual educational environment in which creative learning and innovative thinking would thrive. This meant discarding certain inhibiting traditional emphases, such as a preoccupation with the mechanics of the teaching-learning process, a rigidity of approach that precludes relevant questions and exploration by the student, and lack of opportunity for individual experimentation with problem-solving.

Dietetics is a "people-oriented" profession, and if students are not provided with adequate opportunity to experience human relationships with clients, employees, other professionals, and community representatives,

we defer the achievement of perhaps the most important skill of our profession, the ability to work effectively with people. As academics, we too often provide our students with biased, unrealistic preparation for the real world. Our dietetic technicians must be able to perform creatively and productively against a practical, rather than a resolutely theoretical, background.

Keeping this fact in mind, our faculty began about three years ago to plan an instructional system that would allow the employed, part-time student to incorporate his employment experience into his academic experience and, at the same time, gradually fulfill the requirements of the newly identified dietetic paraprofessional roles. We call the curriculum and accompanying educational system that resulted a "seminar-practicum." As applied to the dietetic technician, it consists of three parts:

(a) A required work experience of 15 hr. a week in a quantity food service operation with at least some affiliation with a health care facility.

(b) Self-instructional modules which present cognitive information, a method for testing the student's knowledge, and a mechanism for directing the student's on-the-job experience.

(c) A 2 1/2 hr. weekly seminar to guide the student in evaluating both the theory and the practice of that theory as he has observed it in his employment experience.

The design of the instructional system during the first year of this associate degree program relies on classroom instruction to provide general education courses and professionally related prerequisite courses

required for implementation of our seminar-practicums. In the second year, students enroll in four courses specifically developed for the seminar-practicum format.

The seminar-practicum courses--"Quantity Food Production Problems," "Food Production Systems," "Hospital Food Operating Systems," and "Normal Diet Modifications"--were developed from the basic philosophy that none of our courses could be fruitfully taught apart from each other and that it was genuinely important to demonstrate how subject matter was interrelated and subsequently how it could be applied in the clinical facility where the student was employed.

The course in "Quantity Food Production Problems," for instance, provides students with basically the same cognitive information found in the typical quantity food production texts, such as production principles, food characteristics, recipe standardization, portion control, and production problems with convenience food items and special diet foods. The difference is that it was designed as a "systems course," i.e., that the information is related to an operating system. In this and other seminar-practicum courses, "The Ideal Pedagogical System" (TIPS) approach discussed later in this article was used to achieve the necessary relationship to an operating system.

The same problem existed with the second course in the three-course sequence on management systems, "Food Production Systems." The course had to provide cognitive information delinieating the routine supervisory skills needed to manage the food production component of a food service operation, which includes precosting, purchasing policies and procedures, purchasing specifications, storage procedures,

receiving practices, payroll and schedulign guidelines, manpower requirements, and background material on historical food cost controls. This course also included a series of analysis projects designed to equip our students with the competencies needed to function in the third management course.

The third course in this sequence is entitled "Hospital Food Operating Systems." It provides less cognitive information than the first two, but it forces our students to sharpen their decision-making skills and to study the various ways in which the parts of an entire food service and nutrition care system interrelate and function. This course includes all the essential cognitive information not yet included in the other professionally oriented courses. Most crucial in this course are case studies which require the students to analyze and evaluate realistic managerial situations and, at the same time, to synthesize a hypothetical operating system.

Since we believed that everything taught in food service must center on the clients we serve, we included new information on identifying a target population and on layout and design conventions. The students are asked to evaluate an existing food service layout according to two criteria: whether the menu meets the needs of the client group and whether the layout reflects the requirements of that menu.

Our fourth seminar-practicum course, dealing with modifications of the normal diet, is designed so that directed learning experiences, correlated with the subject matter, can be included in the self-instructional modules. For example, to learn, in theory, what a

health care facility is and how it provides its clients with the spectrum of health care services, our students are equipped with certain cognitive information and are then required to work an 8-hr. shift with a nursing team leader who demonstrates and reinforces that information. As the student studies laboratory test diets, for instance, she is required to trace the x-ray procedure, beginning with the preparatory diet, through the other preparatory procedures, and finally into the x-ray department itself. In this way, she develops an appreciation of how a particular diet affects an important and complex diagnostic procedure. It also makes that student aware of the patient's feelings (which may reflect fear and espair) about his diet and the subsequent diagnostic procedure. This course includes such learning experiences for each of eighteen modules. In this course, also, the student studies dietary modifications required by specific diseases as the opportunities present themselves within the facility.

Self-instructional Modules

The self-instructional modules developed as integral parts of these four courses both direct and complement the seminar content and the clinical experiences of our students. More specifically, they serve these four basic purposes[5]: (a) they provide the students with cognitive information, i.e., with a text; (b) they encourage students to evaluate the food service operations in which they are employed according to the standards suggested in the text; (c) they provide self-reinforcing questions, quizzes, skill analyses, and behavioral objectives so that students can continually evaluate their own progress;

[5]Hicks, J. B., Application of a self-instructional system for para-professional education in home economics. Paper presented at meeting of American Home Economics Assoc., June 27, 1973.

and (d) they provide a realistic mechanism for comparing and applying cognitive information to an actual food service system--the TIPS component.

We adapted the modules that accompany the four courses from those developed by Shear and Ray of the College of Education, Pennsylvania State University. The Shear-Ray modules are known as "Home Economics Learning Packages," or by the acronym HELP.

A self-instructional package is a unique unit of information used to inculcate one basic concept or idea at a time. With each package, a learner may proceed at his own pace and in his own way by selecting from among a variety of resource materials--all of which are essential to the overall course content. Built into each package is a pretest, a series of self-evaluation problems at the end of the lesson, and a final post-test. In the "Food Production Systems" course, at the suggestion of our consultants, skills sections were included which concentrated on how tasks were performed. Cognitive information (the "what's" and the "why's") was presented in text form, accompanied by a section that would require students to learn and then apply the psychomotor skills appropriate for that particular module. For example, if a module explored the principles of salad preparation, students would need to know not only what the standard salad ingredients are (base, filler, garnish, and dressing) and why salad ingredients are handled in a prescribed manner, but also how to use a French knife, how to clean the various salad ingredients, and so forth. Thus, performance criteria were identified for each skill.

TIPS

The next step in developing the instructional system was to relate the cognitive information and the psychomotor skills in the self-instructional modules to the practicum or field experience. Our educational design research specialist, Suellen Wayda, formulated a new teaching strategy, called "The Ideal Pedagogical System" (TIPS) which established the necessary connection between theory and practice[6]. The TIPS instructional model, a third component of our self-instructional module, introduced a fictitious health care facility to demonstrate how subject matter relates to the food service system. In our "Food Production Systems" course, for example, the TIPS model is called "Short-Stay General Hospital," and the section outlines the types of services "Short-Stay" provides and the production problems it typically faces. Each module includes a discussion of how the cognitive content relates to "Short-Stay General Hospital." If our students were studying salads, the TIPS component of the module would discuss (a) how "Short-Stay" prepares its salads; (b) why "Short-Stay" includes salad items on its menu; (c) how many salad workers it needs in view of the current patient population and what skills these workers require; (d) the type of equipment "Short-Stay" needs to prepare its salads; (e) which considerations regarding cost, purchasing, storage, and sanitation present themselves in connection with salad service at "Short-Stay"; and (f) what considerations about modified diets must be met at "Short-Stay" to supply the dietary requirements as efficiently as possible.

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[6]Wayda, S., The development of self-instructional modules for hospitality education. Paper presented before the American Home Economics Assoc., June 27, 1973.

This TIPS approach provides our students with a realistic frame of reference for analyzing operations in their own places of employment; it has also generated lively and productive seminar discussions. The tension between reading about the "ideal" and living with the "actual" helps provide the creative learning environment essential to our system.

Thus we realized that as our interests extended beyond providing subject matter relevant to our students' potential roles, we became more confident of achieving our goals as educators of dietetic professionals.

Problems to be Met

The instructional system design used in the technician program has already been tested in our commercial food service associate degree program at the Berks County Campus near Reading. This test has helped to avoid many problems that might otherwise have slowed our progress. Nevertheless, our overall success has yet to be completely gauged. Our first seminar-practicum for the technician program is currently being tested. On the basis of our experience with the commercial program, we know that we will probably need to address ourselves to at least some of the following problems:

First, getting the commercial food service seminar-practicum under way in an educational system where students were accustomed to traditional classroom lectures occasioned some difficulty. Many students were vexed at first by adjusting to active participation in their own education. This problem will certainly not be as pronounced in our technician program where our students were introduced to seminar

techniques in their first term. By the second year of their education, we predict they will have become eager participants.

Second, on the Berks Campus, the physical arrangement of the classrooms encouraged the conventional student-instructor antithesis rather than the informal, seminar-discussion format. The transition from "teaching" to "facilitating the learning process" had to be made; it was not an easy task.

Third, locating and obtaining field experiences in which the students could function as paid employees involved a new set of problems, such as convincing employers that the students could make valuable contributions while at the same time learning the operational and social skills necessary to function as a practitioner. Another problem involved the legal constraints of such a program.

One further issue--finding faculty with the numerous competencies needed for implementing such a system--must also be met. Our faculty must be receptive to new instructional techniques and have a feeling for good interpersonal relations so that a creative learning environment can exist. This is probably the greatest hurdle in program implementation.

Conclusion

The instructional module used in the dietary technician program at The Pennsylvania State University is only one of many such programs and, like any model, is not to be considered the best. It does, we believe, achieve the objective of bringing together theory and practice within the professional environment. It makes use of a self-instructional

module that allows the student to progress at his/her own rate of speed in newly designed systems courses that emphasize relationships between operation and subject matter. It provides a mechanism for introducing management principles and skills into a curriculum that meets the competency level defined for the technician. Finally, it provides the mechanism needed to translate courses into an external degree mode.

VI

EVALUATION OF AN EXEMPLARY HOSPITALITY EDUCATION PROGRAM

by

Susan F. Weis, D. Ed.

EVALUATION OF AN EXEMPLARY HOSPITALITY EDUCATION PROGRAM

Dr. Susan F. Weis
Assistant Professor
Home Economics Education
The Pennsylvania State University

At the 1973 Annual Meeting of the American Home Economics Association, the preliminary report of the evaluation of a demontration program for hospitality education was presented.[1] This report dealt with initial data to answer four evaluative questions which would reflect the success of the Demonstration Program as a generalizable alternative to traditional instructional systems for hospitality education. These questions were

1. Does the Demonstration Program prepare students for their careers as adequately as traditional programs?

2. Is the Demonstration Program successful in attracting and retaining economically disadvantaged students?

3. Are the students attracted to this program as academically qualified for postsecondary education as those attracted to comparable programs?

4. Has the Demonstration Program produced a di ference in its students in terms of the attainment of measurable attitudes, skills and knowledge?

Procedures

The plans for evaluating the Demonstration Program involved three phases of evaluative activities. The initial phase concerned an assessment of the effectiveness of the first year of the program in educating its students as compared with other associate degree programs

[1]This article is adapted from a speech delivered before the American Home Economics Association's 65th Annual Meeting, Los Angeles, June 25, 1974.

in hospitality education. Criteria for effectiveness included degree of vocational commitment, achievement of a knowledge base in food production and service, high school grade point average, first year college grade point average, and socio-economic level.

The second evaluation phase focused upon a comparative pre- and post- program analysis employing the criteria of vocational commitment, and the achievement of knowledge bases in food production and service and food production management.

The third evaluation phase concerned a comparative analysis with students in other programs using the criteria of vocational commitment, employers' rating of program graduates, and entry level salaries.

The basic hypotheses being tested in this project were (1) that students in the Demonstration Program will perform at a level equal to students enrolled in comparable programs with respect to indices of vocational commitment, achievement of basic knowledge, selected competencies in the hospitality industry and in job placement and job performance; (2) that students recruited to the Demonstration Program will not differ from students recruited to similar programs in terms of high school achievement; and (3) students enrolled to the Demonstration Program will represent the economic disadvantaged to a greater degree than students enrolled in comparable programs.

Instrumentation

The following instruments were developed and used in evaluating the instructional system: The Vocational Commitment Index[2]; an

[2]Weis, S. F. and Hubbard, C. F. The Vocational Commitment Index, Home Economics Research Journal, 1973, 2, 105-111.

achievement test on food production and service[3]; an achievement test on food production management[4]; Hollingshead's Two Factor Index of Social Position[5]; an employer's rating form; and two information sheets.

Evaluation: Phase One

Sample. The sample for the first phase of the evaluation activities consisted of all available students beginning their second year of the Demonstration Program (n=17) and all available students beginning their second year in associate degree programs in hospitality education at the University of Massachusetts (n=39) and Paul Smith's College (n=14).

Data collection. All data for the initial phase was collected during the first week of November, 1972. The data collection devices were administered to students in the three programs by project staff members.

Data analysis. To test the hypothesis,

> associate degree students enrolled in the Demonstration Program will not differ significantly from students enrolled in comparable programs with respect to indices of vocational commitment and achievement,

a series of one-way analysis of variance tests were preformed using scores on the Vocational Commitment Index, and scores on the Food

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[3]Weis, S. F. Food Production and Service Achievement Test Manual. University Park: The Pennsylvania State University, 1973. Multilithed.

[4]Weis, S. F. Food Production Management Achievement Test Manual. University Park: The Pennsylvania State University, 1973. Multilithed.

[5]Hollingshead, A. B. A Two-Factor Index of Social Position. New Haven, Connecticut: 1957. Multilithed.

Production and Service Achievement Test of subjects grouped by programs. The F ratio resulting from the analysis of scores on the Vocational Commitment Index was .063 (nonsignificant, $p < .05$). The summary appears in Table 1; group means and standard deviations appear in Table 2. These results indicate that the degree of vocational commitment was not significantly different among the three groups.

Table 1. Analysis of Variance of Scores on Vocational Commitment Index of Students in Three Programs

Source	df	Sum of Squares	Mean Square	F Ratio
Program	2	47.290	23.645	.063
Error	94	35481.824		
Total	96	35529.113		

Table 2. Group Means and Standard Deviations on the Vocational Commitment Index.

N	Mean	Standard Deviation
17	221.824	15.109
41	219.902	19.469
39	220.821	20.943

The results of the analysis of variance tests computed on the Food Production and Service Achievement Test mean scores of the three groups are presented in Table 3. A significant ($p < .01$) F ratio of 7.706 emerged in this analysis. Group means and standard deviations appear in Table 4. These results indicate that the performance of the three groups differed significantly: the Demonstration Program subjects scored a lower mean performance on achievement than subjects in the two comparable programs. Therefore, the hypothesis is partially supported: Demonstration Program students perform at a similar level to students in comparable programs with regard to the criterion variable of vocational commitment. However, Demonstration Program students perform at a similar level to students in one comparable program and at a significantly lower level students in another comparable program on an achievement test of food production and service.

Table 3. Analysis of Variance of Scores on the Food Production Service Achievement Test of Students in Three Programs

Source	df	Sum of Squares	Mean Square	F Ratio
Program	2	973.409	486.704	7.706*
Error	94	5936.921	63.159	
Total	96	6910.330		

* significant, $p < .01$

Table 4. Group Means and Standard Deviations on the Food Production and Service Achievement Test

N	Mean	Standard Deviation
17	38.059	7.075
41	38.122	7.991
39	44.564	8.242

To compare the performance of Demonstration Program students with the students in comparable programs grouped together, two t tests were performed using scores on the Vocational Commitment Index and on the Food Production and Service Achievement Test for the 17 Demonstration Program students and the 80 comparable students. Table 5 presents the results of these analyses. The t value for vocational commitment was -.343 (nonsignificant and the t value for achievement was 1.625 (nonsignificant).

Table 5. Means, Standard Errors Squared and t Values of Two Groups of Subjects on the Vocational Commitment Index and Food Production and Service Achievement Test.

	Demonstration Program Students			Students From Other Institutions	
	Mean	St'd Error^2	t Ratio	Mean	St'd Error^2
Vocational Commitment Index	221.82	13.43	-.343	220.35	5.04
Food Production and Service Achievement Test	38.06	2.95	1.625	41.26	.94

These findings suggest that Demonstration Program students can perform at a level similar to the average performance of students in comparable programs on the criterion variables of commitment to the vocation and achievement of basic knowledge in this field when the differences between the two comparable programs are not taken into consideration.

A second hypothesis predicting no significant differences between Demonstration Program students and students enrolled in two comparable programs when the criteria are high school grade point average and first year college grade point average was tested using a series of one-way analysis of variance tests. The results of the analysis of variance on the high school grade point average, presented in Table 6, yielded a nonsignificant F ratio of .131 (p .05). Group means and standard deviations are presented in Table 7. These results indicate that high school grade point averages were not significantly different among the three groups of students. These results were supported by the emergence of a nonsignificant T ratio of -.678 secured from a t test computed between Demonstration Program students and all other students grouped together, as illustrated in Table 8. These findings indicate that students in the Demonstration Program are similar to students in the two comparable programs with respect to academic performance in high school.

Table 6. Analysis of Variance of High School Grade Point Average of Students in Three Programs

Source	df	Sum of Squares	Mean Square	F Ratio
Program	2	.213	.107	.131
Error	94	76.763	.817	
Total	96	76.976		

Table 7. Group Means and Standard Deviations on High School Grade Point Average

N	Mean	Standard Deviation
17	2.581	.452
41	2.450	.937
39	2.505	1.005

Table 8. Means, Standard Errors Squared and t Values of Two Groups of Subjects on High School and College Grade Point Averages

	Demonstration Program Students			Students From Other Institutions	
	Mean	St'd Error^2	t Ratio	Mean	St'd Error^2
High School G.P.A.	2.58	.01	-.678	2.48	.01
First Year College G.P.A.	2.45	.01	4.848*	2.94	.01

*significant, p .01

A significant F ratio of 7.069 (p .01) emerged on the analysis of first year college grade point average between the three groups of students. Results of this analysis are presented in Table 9 and group means and standard deviations are presented in Table 10. These results indicate that the first year academic performance of students in the three programs differed significantly with Demonstration Program students averaging the lowest grade point average of the three groups. A t test performed between Demonstration Program students and all other subjects grouped together yielded a significant t value of 4.848 (p .01). The results of the t test are presented in Table 8. The findings indicate that the academic performance of students in comparable programs was significantly higher than that of the students enrolled in the Demonstration Program for the first year of college.

Table 9. Analysis of Variance of First Year College Grade Point Average of Students in Three Programs

Source	df	Sum of Squares	Mean Square	F Ratio
Program	2	4.127	2.063	7.069*
Error	94	27.437	.292	
Total	96	31.564		

* significant, p .01

Table 10. Group Means and Standard Deviations on First Year College Grade Point Average

N	Mean	Standard Deviation
17	2.446	.328
41	3.032	.481
39	2.850	.658

These findings partially support the second hypothesis regarding the academic competence of students recruited to the Demonstration Program as compared to that of students in similar programs. Demonstration Program students appear to be academically as qualified as students in other programs when recruited to the program. But, Demonstration Program students do not maintain academic equality with their peers during the first year of college.

A third hypothesis, predicting that students in the Demonstration Program will represent a significantly different socioeconomic status from those students in two comparable programs, was tested using a one-way analysis of variance on group means from Hollingshead's Two Factor Index of Social Position. The resulting F ratio, presented in Table 11, was 1.662 (nonsignificant, p. .05). Descriptive data on the group means and standard deviations are presented in Table 12. When Demonstration Program students were compared with all other students in a t test computed on group means on Hollingsheads's socio-economic status index, a nonsignificant t value of -1.072 emerged. The

t test results are presented in Table 13. The findings from these analyses indicate that Demonstration Program students do not differ from their peers in other programs with regard to socioeconomic status. Therefore, the three programs recruit students from similar socioeconomic levels. Hypothesis 3 is rejected.

Table 11. Analysis of Variance on Socioeconomic Status of Students in Three Programs

Source	df	Sum of Squares	Mean Square	F Ratio
Program	2	5.037	2.518	1.662
Error	94	142.468	1.516	
Total	96	147.505		

Table 12. Group Means and Standard Deviations on Socioeconomic Status

N	Mean	Standard Deviation
17	2.941	1.560
41	2.341	1.217
39	2.692	1.080

Table 13. Means, Standard Errors Squared and t Ratio of Two Groups of Students on Socioeconomic Status

	Demonstration Students		Students From Other Institutions
Mean	2.94		2.51
Standard Error[2]	.14		.02
t Ratio		-1.072	

Discussion of Findings From Initial Evaluation

The results of the analysis of data for the initial phase of program evaluation suggest the following conclusions.

1. Students entering the Demonstration Program are academically equal to students enrolled in comparable programs in terms of evidence of high school achievement. Therefore, the program can be considered as providing educational experiences for students who have similar academic backgrounds to those participating in other programs for hospitality education.

2. Students enrolled in the Demonstration Program achieve a significantly lower grade point average for the first year of their college experience than do students in other programs. Therefore, a more thorough analysis of student course load, study time, and other factors influencing the academic performance of students is warranted.

3. Demonstration Program students perform at a level similar to those in comparable programs on a measure of vocational commitment. Therefore, the Demonstration Program can be considered successful in inspiring its students toward assuming positions as vocationally committed employees in the hospitality industry. As prospective mid-management personnel, their commitment is viewed as a necessary attitudinal component for occupational success.

4. Evidence of student achievement of knowledge of food production and service as provided by scores on an achievement

test suggest that Demonstration Program students have not achieved this knowledge base at a level comparable to that of students in other hospitality education programs. Therefore, a reassessment of the Demonstration Program is warranted to strengthen and reinforce student achievement of basic knowledge in food production and service.

5. To date, the Demonstration Program has not succeeded in enrolling students from economically disadvantaged families to a greater extent than comparable programs. Therefore, efforts to publicize the program among people of lower economic statuses need to be increased.

Evaluation: Phase Two

The second phase of evaluation focused upon a pre- and post-program analysis. Criteria for this analysis include vocational commitment and the achievement of knowledge bases in food production and service in food production management.

Sample. The sample for the second phase of evaluation comprised all students who began their second year of the Demonstration Program in Fall 1973 (n=39) and all students who ended their second year of this program in the Spring of 1974.

Data collection. Data was collected from 30 subjects beginning their second year of the program in September, 1973, and in May, 1974, as these same subjects ended their second year of the Demonstration Program. This data included the Vocational Commitment Index, the Food Production and Service Achievement Test, and the Food Production Management Achievement Test.

Data analysis. A hypothesis predicting no difference between subjects beginning the second year and subjects ending the Demonstration Program with respect to indices of vocational commitment and the achievement of knowledge of food production and service and food production management was tested with a series of independent, non-

correlated t tests.

Results of the t tests performed appear in Table 14. These results indicate that the performance of students ending the program does not differ significantly from their performance as beginning second-year students with respect to vocational commitment. However, significant differences (p .01) are evident between the performances of these subjects as beginning and ending students on the two achievement tests. Subjects ending the program achieved significantly higher scores on the tests for Food Production and Service and Food Production Management than they achieved as beginning second year students. These findings indicate partial rejection of the hypothesis of no difference between pre- and post-program data.

Discussion of Findings From Second Evaluation Phase

Results of the analyses for the second phase of evaluation indicate the following conclusions.

1. The second year of the program appears to enhance student achievement of a knowledge base in the areas of food production and service and of food production management as evidenced by significant differences between performance on the Food Production and Service Achievement Test and the Food Production Management Achievement Test of students beginning and ending their second year of study.

2. No significant difference appeared between the beginning and ending performance of students on the measure of vocational commitment although the mean score on this device was higher for the students when they started their second year than when they ended this year. The slight drop in the mean score may reflect the modification of vocational commitment from an idealistic to a realistic level as students gain greater knowledge about their career field or may represent a reduction in the level of commitment due to the second year of the Demonstration Program.

Table 14. Means, Standard Deviations and t Values of Differences Between Students Beginning and Ending the Second Year of the Demonstration Program on Three Measures

	Beginning Students	Ending Students
n	30[1]	31[2]
Vocational Commitment Index		
Mean	229.97	218.18
Standard deviation	22.14	24.70
t value	1.909 n.s.	
Food Production and Service Achievement Test		
Mean	30.73	38.33
Standard deviation	6.46	8.19
t value	3.859*	
Food Production Management Achievement Test		
Mean	27.75	36.81
Standard deviation	5.61	5.94
t value	6.022*	

[1]Data from two subjects was unavailable on the Food Production Management Achievement Test.

[2]Data from 4 subjects was unavailable on the Vocational Commitment Index anc Food Production and Service Achievement Test

n.s. - nonsignificant

* - significant, p. <.01

Evaluation: Phase Three

This final phase of evaluation compared graduates of the Demonstration Program with graduates of two comparable programs using the criteria of vocational commitment, employer's rating of employee performance, and entry level salary.

The major hypothesis being tested was that graduates of the Demonstration Program do not differ from graduates of comparable programs with regard to indices of vocational commitment, job placement, salary, and job performance.

Sample. Subjects for this evaluation were recruited from the graduates of the Demonstration Program (n=12), and graduates of two similar programs (n=125).

Data collection. The data collection was conducted in February and March, 1974. Letters enclosing an information form, the Vocational Commitment Index, and a return envelop were sent to 137 prospective subjects, soliciting their participation in the final phase of program evaluation. As these materials were completed and returned by participating subjects, returns were processed. A letter and an Employer Rating Form were sent with a return envelop to all employers of subjects.

This data collection effort has been less satisfactory than anticipated. Thirty-six (or 26 percent) of the 137 persons solicited responded after 2 1/2 months and efforts to follow-up Demonstration Program graduates via telphone, to secure a greater proportion of returns were unsuccessful.

Only 5 of the 12 Demonstration Program graduates responded to the

solicitation for data. This figure represents 42 percent of the graduate class. Eighteen of the 83 graduates of Program I responded; a figure which represents 22 percent of this class. Thirteen, or 31 percent of the 42 Program II graduates responded to the data solicitation. The low proportions of subjects representing each group of graduates is cause to question the validity of these data.

Of the Demonstration Program graduates responding, 3 had secured jobs in their career field, and 2 of the 3 graduates were still employed in these jobs and had received salary increases. Two of these graduates had enrolled in a four-year college program and were majoring in a hospitality program.

Data from the 18 Program I graduates responding indicated that 3 were continuing their education in hospitality programs, and 13 graduates were employed in jobs in the hospitality field while 2 had jobs in unrelated fields. Ten of the 13 were still in these jobs and 9 had received raises in salary.

Four of the Program II graduates were continuing their education in career related programs and 10 had secured jobs in the hospitality industry. Of these 10, 7 were still employed in their jobs although 8 had received salary increases. This data is summarized in Table 15.

Table 15. Post Graduation Status of Subjects from Three Programs

Status	Demonstration Program Graduates (n=12)		Program I Graduates (n=83)		Program II[1] Graduates (n=42)	
	No.	%	No.	%	No.	%
Responding to data solicitation	5	.42	18	.22	13	.31
Continuing education	2	.40	3	.16	4	.30
Job in hospitality industry	3	.60	13	.72	10	.77
Job in other field	0	00	2	.11	0	00
Still employed on job[2]	2	.67	10	.77	7	.70
Received salary raise[2]	2	.67	9	.69	8	.80

[1] one subject held a fulltime job while enrolled as a student in a four-year college program

[2] percentages based on number of subjects with job in hospitality industry from each program

Data analysis. A hypothesis predicting no difference between Demonstration Program graduates and graduates of two comparable programs with respect to indices of vocational commitment, job placement, salary and job performance was tested with a series of one-way analysis of variance tests.

Results of the analysis of variance computed on Vocational Commitment Index scores of the three groups are presented in Table 16. Group means and standard deviations are summarized for the three criterion variables in Table 17. This analysis yielded a nonsignificant

F ratio of .493 indicating that graduates of the three programs do not differ in vocational commitment.

Table 16. Analysis of Variance of Scores on Vocational Commitment Index of Graduates From Three Programs

Source	df	Sum of Squares	Mean Square	F Ratio
Program	2	482.6	241.3	.493
Error	25	12243.5	489.7	
Total	27	12726.0		

Table 17. Group Means and Standard Deviations on Three Variables of Graduates From Three Programs

	Demonstration Program Graduates	Program I Graduates	Program II Graduates
Vocational Commitment Index			
N	3	14	11
Mean	242.33	228.36	230.82
Standard Deviation	29.36	20.91	21.98
Salary Level			
N	3	14	11
Mean	3.33	3.14	3.00
Standard Deviation	1.15	.66	.89
Employer's Rating Scale			
N	3	8	10
Mean	30.67	33.25	30.70
Standard Deviation	3.21	6.13	5.12

Coded values were used to represent 7 levels of salary from under $5000, $5000 to $6999, $7000 to $8999, $9000 to $10999, $11000 to $12999, $13000 to $14999, and over $15000. No subjects indicated salaries above $12999 so the last two categories were unnecessary. The coded values were analyzed using an analysis of variance test. The analysis yielded a nonsignificant F value of .227 indicating no significant differences between the salaries earned by graduates from the three programs. Each group of graduates earns an average salary of from $7000 to $8999.

The F ratio resulting from the analysis of variance computed on scores from the Employer's Rating Scale was .560 (nonsignificant). This finding indicates no difference between graduates in three programs in the employers' assessments of the performances of these graduates.

The findings from these analyses support the hypothesis of no difference between Demonstration Program graduates and graduates of two comparable programs. Individuals graduating from the Demonstration Program demonstrate similar vocational commitment and job performance and similar salaries to persons graduating from two other programs.

Discussion of Findings From the Third Evaluation Phase

The third evaluation phase yielded results which suggest that the Demonstration Program produces graduates who compete for jobs in the hospitality industry equally with their counterparts from other programs. More specifically, the graduates of the Demonstration program appear to secure jobs in a comparable proportion to those from other programs, retain this employment and earn merit salary increases in similar proportions to those in other programs, receive similar performance

ratings from their employers, receive similar salaries, and demonstrate similar levels of vocational commitment. From 16 to 40 percent of the graduates seek baccalaureate degrees in hospitality programs. Although the data reflects a favorable evaluation of the Demonstration Program, these optimistic results should be received with caution since the findings are based on data obtained from only 26 percent of the graduates of the three programs.

Summary

The results of the evaluation efforts have been used to provide feedback over the several years of the Demonstration Program. Modifications in student recruitment, course content, and instructor roles have occurred as the project staff adjusted to and shaped the emerging prototype program.

Self-instructional textbooks have been developed and refined for use in associate-degree hospitality education. These materials have employed the concept of a theoretically ideal food service operation in order to provide a basis of student interpretation of the realities encountered in their work experience in practicums situated in actual operations. Seminar sessions afforded an arena for student discussion of the knowledge and skills gained from both the textbooks and the practicums. Evaluation devices developed during the project served the twin purposes of student assessment and program assessment.

The final verdict on the program's effectiveness in producing qualified middle management personnel for the hospitality industry appears tentatively to rest on the minimally representative favorable data discussed in this paper. The program is, in any case, an emerging

possible alternative to the traditional laboratory-oriented associate degree programs for hospitality education.

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VII

THE SEMINAR PRACTICUM: A COMMUNITY BASED INSTRUCTIONAL SYSTEM FOR PARAPROFESSIONAL EDUCATION

by

Thomas F. Powers, Ph.D.

THE SEMINAR PRACTICUM:
A COMMUNITY BASED INSTRUCTIONAL SYSTEM
FOR PARAPROFESSIONAL EDUCATION

by

Thomas F. Powers, Ph.D.
Professor in Charge
Food Service and Housing Administration
The Pennsylvania State University
University Park, Pennsylvania 16802

Introduction

In the course of the past four years a program to redesign the Hotel and Food Service associate degree at The Pennsylvania State University has been undertaken, with support from the Research Coordinating Unit of The Pennsylvania Department of Education, with three basic purposes in view.* First of all, the redesign proposed to develop a curriculum responsive to the needs of "knowledge workers" as that concept has been put forward by Drucker and others.[1] Knowledge workers establish an initial competency within a knowledge base and must then evolve with that knowledge base. The knowledge worker can be contrasted to the skilled worker who masters a skill perceived as static through experience, and focuses on how to perform a skilled set of operations. The knowledge worker uses a knowledge base--and skills acquired subsequent to his education--to perform services which are

*This article is adapted from a speech delivered at the annual meeting of the American Home Economics Association; Los Angeles, June 25, 1974.

essentially problem solving rather than performance oriented.

Secondly, the curriculum was planned to develop a controlled field experience. Thirdly, the curriculum addressed certain logistical problems confronted by the University as it made the decision to move the Hotel and Food Service Associate Degree Program from the central University Park Campus to one or more of its 21 Commonwealth Campuses which cover the state of Pennsylvania.

The seminar practicum has been described as

> A new instructional system [that] relies on a triad of learning opportunities presented to the student. First of all, the student is required to work as an employee, on a part-time basis, in an industry setting.
>
> The second element of the instructional system consists of self-instructional modules which direct the student's attention in the workplace, on a week by week basis, to the subject matter area to be addressed as the course progresses. The self-instructional modules not only provide a vehicle for controlling the focus of the student's attention but also for supplementing the student's learning in the workplace.
>
> The final element in the instructional triad is a weekly seminar of some 2-1/2 hours length. The function of the seminar is principally one of clarification and integration of the week's learning experiences.[2]

Early in the design stage of this project, it became clear that the extensive reliance of the seminar practicum on field experiences required that the system developed be community based rather than, as in traditional educational programs, a campus based program. (This is not to say that the campus was secondary, but rather that the extensive reliance on industry for field settings made industry support <u>absolutely</u>

essential, rather than marginally important.) Early work by Hicks in administering the system taught us that an important benefit of the instructional system, whose importance had initially not been recognized, was that of the acculturation of the student to the world of work and to adult responsibilities.[3] The model we adopted was that suggested by Harrison and Hopkins who pointed to the inadequacies of the traditional university educational model in preparing students for real world experience (in their case, work in the Peace Corps). Volunteers who were trained in the program which Harrison and Hopkins studied were not dissatisfied with the cognitive content of the educational program but rather with the sense that their training experience, however interesting or well prepared it may have been simply did not equip them for the real world challenges that they were required to confront on completion of the program of study.[4] The conscious discovery of the acculturative role of post-secondary education programs became an important element in the evolving concept of the seminar practicum.

The importance of field experience in the hotel, restaurant, and institutional (HRI) management curriculum has been established in a recent study by Koppel.[5] His work indicates that over three quarters of the Hotel, Restaurant and Institutional Management programs studied required field experiences. Of the 37 respondents in that study who felt that some change in their program of field experience would be appropriate, 36 felt that it should be extended in length, and only one felt that it should be reduced in length. Clearly, the seminar practicum incorporates an important element in any HRI practicum, that of first-hand experience of the complex system that is the hospitality

firm or establishment.

An earlier report on the seminar practicum, as a developing system, noted the difficulty of severe time constraints in the development of the seminar practicum and accompanying instructional materials.[6] That report was offered only a few weeks after the conclusion of the first year of offering the seminar practicum. The present study has the advantage of a second year's experience in a less time-bound context with the operation of the three terms of seminar practicum on a campus in which the curriculum emphasizes Commercial Hotel and Food Service Operations and on a second campus in which the curriculum has been shaped to meet the needs of the Dietary Technician.

After discussing further the importance of the field experience in HRI programs, this paper compares the seminar practicum with traditional field experiences and reports on interviews with students, faculty, and employers who have been involved in the seminar practicum at two campuses of this University. In reporting this interview data, an attempt is made to assess the impact of the seminar practicum as a tool for effecting the acculturation of the student to the world of work; to report on the positive and negative aspects of the perceived success in addressing the knowledge base of the hospitality paraprofessional; and to suggest the degree of community acceptance achieved by the program. Finally, the logistical advantages of the system are discussed.

The Field Experience in HRI

The widely recognized importance of field experience in HRI curricula has been documented by Koppel's recent study, using responses

from 87 two and four year HRI program chairmen.[7] As noted earlier, 78 percent of the respondents required a field experience. Table 1 summarizes the proportion of respondents ranking various areas of their curriculum as "very important." For both two- and four-year programs, courses from the major are rated as the most important with approximately 80 percent of the respondents ranking this element as "very important". The second most important element according to these responses was the professionally related field experience which far outweighed any component of the curriculum, other than courses from the major, in importance in the view of the respondents. It is possible, however, to find in Koppel's data reasonable empirical justification for the assertion that the typical HRI field experience is an unstructured one. While very few institutions would accept non-HRI industry jobs for the field experience, the vast majority would accept nearly any employment at all that was within the field. It may be useful here to note that the student's job and employment site in the seminar practicum must be approved by the instructor and are subject to his continuous re-evaluation.

Half the four-year programs responding and nearly all the two-year programs responding assigned a grade to field experiences, but the reported basis for evaluating that field experience as well as of supervising it strongly support a presumption of an unstructured practicum. Only 14 percent and 28 percent, respectively, of the two- and four-year programs indicate that evaluation of the field experience is conducted by institution faculty alone. Fourteen and 22 percent, respectively, of these institutions reported that the employer or his representative--clearly not college or university supervision--was responsible for evaluating the field experience, while 72 and 50 percent, respectively,

TABLE 1

Proportion Ranking Curricular

Areas as "Very Important"

Curricular Area	Proportion Indicating Very Important	
	Two Year Programs (N=47)	Four Year Programs (N=18)
Courses from the HRI major	.81	.77
Professionally related field experiences	.61	.61
Liberal Arts courses	.19	.11
Other non-technical courses	.11	.06

Source: Koppel, Practices in Required Field Experiences in HRI.

reported "both" faculty and the employer of his representative were responsible for this evaluation. Responsibility for the supervision of the field experience is attributed to program faculty by 8 percent of the two-year and 11 percent of the four-year programs while 8 and 28 percent, respectively, attribute this responsibility to the employer or his representative. Eighty-four percent of the two-year programs and 61 percent from the four-year programs attributed responsibility for the supervision of the field experience to both program faculty and the employer or his representative.

Perhaps the most significant set of responses is the 50 to 85 percent response indicating both faculty and employer are "responsible" for supervision and evaluation of the field experience. Anyone experienced with the practicum, either as an operator in industry or as an academic concerned with the administration and evaluation of field experiences, will recognize that the strong "both" set of responses probably means "none" or very little. The logistical difficulties of closely coordinating the evaluative inputs of two such disparate sources as well as the very limited value of the unidimensional "student rating form" normally in use, together with the potential for inaccuracy, bias, and lack of detailed knowledge on the part of the employer about the student's activities all militate against supervision and evaluation being carried out in any meaningful way by "both" employer and faculty.

The typical two-year program (75 percent of the respondents) requires 500 or less hours, while the typical four year program (77 percent) requires 700 or less hours of practicum experience. The hotel and food service associate degree at Penn State requires a 400-hour summer practicum which is essentially unsupervised and an additional

540 hours of field experience in conjunction with the seminar practicum which is offered in the three terms of the student's second year.

The Seminar Practicum: A Preliminary Evaluation

The conclusions in the balance of this paper are based on a series of telephone interviews with the two faculty members in charge of the University's Berks Campus program (commercial hotel and food service) and the York Campus program (dietary technician emphasis); with over half of the twenty-seven students completing seminar practicums at Berks and five out of seven of the students completing those three courses at York; and, finally, with 12 out of 21 employers who accounted for 64 percent of the student practicum sites. The interviews were unstructured in the sense that a questionnaire was not followed but a check list of points to be covered was available in order to attempt to draw each respondent over all the relevant points of concern. Student responses for both programs are summarized in Table 2, while Table 3 summarizes Berks' student responses, and Table 4 the responses of the students at York. Interviews took place after the end of the term.

Student Reaction

The interviews indicated several rather narrowly focused areas of negative evaluation on the part of the students as well as a more substantial consensus of approval of the instructional system. Before turning to a detailed evaluation of the responses, however, it is useful to report the students' response to an opening, very general question seeking their reaction to the system and any suggestions for improvement. Only one student out of 19 interviewed expressed an overall negative evaluation of the instructional system. Some typical

TABLE 2

Student Reaction to the Seminar Practicum

All Students

Question	Proportion*: Favorable	Neutral or No Response	Unfavorable	Not Applicable
Overall Reaction	.95		.05	
Self-perception of Maturation	.90		.05	.05
Reaction to Vocation	.90	.05	.05	.05
Anticipation of Success	.84	.05	.11	.05
Knowledge Base Coverage	.32	.26	.42	.26
Understanding of Food Service World of Work	.42	.48	.05	.05
Food Production Knowledge	.26	.42	.32	

*N = 19 students out of a total Seminar Practicum enrollment at Berks and York of 34 or 56% of the Seminar Practicum students.

TABLE 3

Student Reaction to the Seminar Practicum

Berks Students

Question	Proportion*: Favorable	Neutral or No Response	Unfavorable	Not Applicable
Overall Reaction	.93		.07	
Self-perception of Maturation	.93		.07	
Reaction to Vocation	.86	.07	.07	
Anticipation of Success	.79	.07	.14	
Knowledge Base Coverage	.14	.36	.50	
Understanding of Food Service World of Work	.29	.64	.07	
Food Production Knowledge	.14	.57	.29	

*N = 14 students out of a total Seminar Practicum enrollment at Berks of 27 students or 52% of the Seminar Practicum students at Berks.

TABLE 4

Student Reaction to the Seminar Practicum

York Students	Proportion*:			
Question	Favorable	Neutral or No Response	Unfavorable	Not Applicable
Overall Reaction	1.00			.20
Self-perception of Maturation	.80			
Reaction to Vocation	1.00			
Anticipation of Success	1.00			
Knowledge Base Coverage	.80		.20	
Understanding of Food Service World of Work	.80			.20
Food Production Knowledge	.60		.40	

*N = 5 students out of a total seminar practicum enrollment at York of 7 students or 70% of the Seminar Practicum students at York.

comments volunteered by students indicated that the seminar practicum experience helped them in approaching potential employers, that it helped them gain confidence in dealing with people, and that it was useful to combine real world experiences with the theory in the classroom. A number of students commented that they were able to learn from observing the mistakes of the managers under whom they worked by contrasting course content with observed field reality. One student of mature years in the York program commented that she would not have thought of seeking the kind of job she was now in (i.e., food service manager) had it not been for this educational experience.

The placement experience of the two programs supports this generally favorable set of responses. Five of the respondents from Berks were employed in food service managerial or supervisory capacities while four of the respondents from York were so employed for a total of nine. An additional three students from Berks were employed in non-management food service occupations while an additional student from Berks was seeking employment in the food service field. Three more students from Berks planned to continue their education in the HRI field. Only two students (Berks) reported no particular plans following graduation and only one more additional student (York) was employed outside the field. (This last student was employed in a clerical position in order to earn money to pay for her forthcoming wedding. She planned to return to food service work as soon as that goal had been attained.) If a commitment to continue to work in the field can be taken as confirming the notion that the program has enlisted the support of the students, then the results reported above of half the students in the food service managerial positions with only two out of 19 without definite plans for a

career in the hospitality industry is encouraging support indeed.

These overall results support the notion that the incorporation of a controlled field experience into an HRI curriculum will meet with student acceptance and perceptions on the part of students of those experiences as valuable learning.

Acculturation to the World of Work

Ninety percent of the students reported positive views of their own maturation. It should be noted that the discussion related to this topic involved a relative judgment. ("Do you think you matured more than you would have done otherwise?") Ninety percent of the student respondents also reacted favorably to their vocational choice and 84 percent anticipated a successful career. Student comments (as well as employer comments, which will be discussed below) indicated that the student's motivation to learn in class was enhanced by his field experience and that motivation in the field was enhanced by classroom and learning module focus.

Knowledge Base Coverage

Not all student responses, however, were so highly favorable. As this program intends to prepare knowledge workers, a first important criterion for success is the adequacy of the knowledge based coverage. In a program intending to prepare students as knowledge workers for specific occupational roles, a perceived understanding of the food service world of work constitutes a second important element for evaluation. Finally, because students and faculty expressed, both during the design and the early implementation stages, serious reservations about the ability of the system to impart food production knowledge, questions

were asked with regard to that subject.

Only 32 percent of the students replied with an unqualified favorable reaction to the questions regarding the adequacy of the knowledge base coverage ("Are there any points you think ought to be covered in the curriculum which aren't?") and at the Berks Campus only 14 percent of the students reacted with unqualified favorable expressions with respect to knowledge base coverage. (Note: Any reaction which expressed any negative content with respect to knowledge base coverage was counted as a negative response.)

As Table 5 demonstrates, criticisms on this score, however, were narrowly focused. Students mentioned four areas specifically as lacking in coverage. Five students mentioned the lack of Hotel/Motel content, which is interpreted to be specifically front office or front desk operations since hotel engineering is covered at considerable length in the curriculum. (This interpretation is further supported by a subjective recollection of the student's comments.) Omission of front office considerations from the curriculum was a deliberate choice on the part of the faculty who reasoned that if a desk clerk can be trained to entry level competence in three working days and to independent, unsupervised competence in two weeks (a fairly common industry standard) then only a limited purpose is served by using university resources to teach this subject matter.

Two students indicated, without being asked, that there was a lack of food production instruction and one additional respondent cited the lack of front of the house (and specifically waiter/waitress training) as being a limitation of knowledge base coverage. Finally, one student from the York Campus (Dietary Technician emphasis) indicated

TABLE 5

Reasons Knowledge Base Coverage
Was Not Judged Adequate
By Students

Reason	Number of Students Responding	
	Berks	York
Lack of Content Regarding:		
Hotel/Motel	5*	
Food Production	2*	
Front of the House (Restaurant)	1	
Special Diet		1

*Total responding exceeds total students evaluating knowledge base coverage unfavorably because one student indicated lack in both the hotel/motel and food production area.

that she would have preferred to have had more special diet information in the curriculum. The eight negative responses to knowledge base covereage are thus seen as focused on areas which have been deliberately omitted from the curriculum as a result of conscious faculty decision.

Nearly half of the students felt that their general familiarity with the food service world of work (as opposed to specific knowledge related to management and operations) was adequate (42 percent) while another 48 percent had a neutral response or did not respond at all to this subject. The neutral response or lack of response was the predominant mode at the Berks Campus, but 30 percent of those students felt that they lacked understanding of the environment that they were about to go out into.

The perceived ignorance in the area of food production knowledge was especially noticeable at Berks where nearly 30 percent of the students had an unfavorable response to a specific question related to food production knowledge while only 14 percent had a favorable response in regard to that subject. This may, in part, be due to the process of development of the Berks program. The students in the previous class (who were second-year students when this year's graduating class were first-year students) were initially admitted to the University Park Campus where a formal food service laboratory was and is in operation. These students were subsequently offered the choice of withdrawing from the University or enrolling at the Berks Campus at Reading, Pennsylvania. Not surprisingly, a number of those students expressed negative evaluation of this decision on the University's part and there was considerable expressed feeling on their part that one of the serious aspects of this change was the absence of a food service lab at the Berks Campus like

the one at University Park. At least some of the response noted in Table 2 may be attributable to the "feedback" of last year's senior students to the then freshman class. The reaction at York, however, has a substantial (40 percent) negative response, suggesting that there are, indeed, grounds for the student's negative evaluation on this score.

Student discussion suggests that this lack of food production knowledge is principally in the area of manipulative skills. In this connection, it may be appropriate to question the degree to which a student working in the traditional laboratory simulation of a kitchen, covering each station on two occasions in a twelve-week term can, in reality, be expected to master the manipulative skills in question here. Since only 14 percent of all employers' reactions (see below) were negative with respect to food production knowledge, it seems possible that the students' reaction overvalues the degree of this deficiency. It is, however, clearly a deficiency perceived as important by the students. I would note, here, that one of the two instructors involved in the current year indicated that students who lack maturity or motivation experience difficulty in developing their skills. This is generally in accord with the reaction of employers, several of whom noted that the motivated student did very well but, in general, that students who lacked motivation did not engender as much interest on the part of the employer in teaching them.

A negative finding with regard to the ability to teach students food production skills is probably supported, particularly in the area of manipulative skills. While faculty did not judge these to be outside the realm of the knowledge base to be addressed, they do assess

them as of secondary importance in a program intended to develop managers. Nevertheless, this must be cited as the single most serious deficiency in the instructional system.

A Community Based System: Community Acceptance

Twelve out of a total of 21 employers who employed 64 percent of the seminar practicum students on the two campuses were contacted by phone for an interview. Employer interview data are summarized in Tables 6, 7, and 8. They offered a strong positive reaction (83 percent) to a first unstructured question seeking their evaluations and suggestions for improvement. This initial reaction is born out by strong positive employer evaluation of the students' commitment to a food service career as well as the students' chances for a successful career in food service. The two employers who had a neutral response to the students' chances of success based that response on their limited knowledge of the student in a managerial capacity while all respondents who reported unfavorably on students' chances for success commented that this was due to the students' lack of motivation or interest.

The high rating of the knowledge base coverage on the part of the employer may reflect as much their lack of specific knowledge with regard to the curriculum as any informed positive judgment. The vast majority of employers felt the students had an adequate understanding of the general world of food service with only one respondent indicating a neutral or negative response on this score. (The 42 percent "not applicable" response reflects the institutional setting of the Dietary Technician trainee employers of the York program, for whom this question did not have the kind of referent it did for the Reading employers.)

TABLE 6

Employer Reaction to Seminar Practicum

All Employers	Proportion*:			
Question	Favorable	Neutral or No Response	Unfavorable	Not Applicable
Overall Reaction	.83	.08	.09	
Perception of Student Maturation	.66	.17	.17	
Evaluation of Student's Commitment to Food Service	.75		.25	
Evaluation of Student's Chances of Success	.58	.17	.25	
Knowledge Base Coverage	.83		.17	
Student's Understanding of the Food Service World of Work	.50	.08		.42
Student's Food Production Knowledge	.58	.25	.17	

*N = 12 (out of a total of 21) employers who employed 64% of the students completing the Seminar Practicum in 1974 at both campuses.

TABLE 7

Employer Reaction to Seminar Practicum

Berks Employers

Question	Proportion*: Favorable	Neutral or No Response	Unfavorable	Not Applicable
Overall Reaction	.71	.14	.15	
Perception of Student Maturation	.57	.28	.15	
Evaluation of Student's Commitment To Food Service	.71	.14	.29	
Evaluation of Student's Chances of Success	.57	.14	.29	
Knowledge Base Coverage	.86		.14	
Student's Understanding of the Food Service World of Work	.86	.14		
Student's Food Production Knowledge	.57	.29	.14	

*N = 7 employers (out of a total of 14) who employed 60% of the students completing the Seminar Practicum in 1974 at the Berks Campus.

TABLE 8

Employer Reaction to Seminar Practicum

York Employers

Question	Proportion*: Favorable	Neutral or No Response	Unfavorable	Not Applicable
Overall Reaction	100			
Perception of Student Maturation	80		20	
Evaluation of Student's Commitment To Food Service	80		20	
Evaluation of Student's Chances Of Success	60	20	20	
Knowledge Base Coverage	80		20	
Student's Understanding of the Food Service World of Work				100
Student's Food Production Knowledge	60	20	20	

* N = 4 out of 5 employers at York who enrolled 70% of the Seminar Practicum students at York.

As noted earlier, only two employers had negative perceptions with regard to the students' food production knowledge while three were neutral or had no response. Over half responded with an unqualified favorable response on this score.

While the positive response of the employers listed above give strong support to a judgment of adequacy with respect to the instructional system and to the curriculum designed, these responses are even more important as an indicator of industry support for the continuation of this community-based instructional system. The employers' overwhelming approval of the program and their completely unanimous willingness to employ students from the program in the future indicate that industry support can be sought and gained for an instructional system that uses industry as a laboratory.

The Instructors' Reaction to the Instructional System

The two instructors connected with the seminar practicum during the current year (as well as the instructor who introduced it in the previous year[8]) expressed strong support for the seminar practicum as an instructional system. Both the previous instructor and the current instructor at Reading expressed concern, however, regarding student employee turnover. Some support for this concern was expressed by several students who indicated that while the turnover was not a problem for them, they thought it might have been for other students. One student referred to "job ducking," a process in which a student would take a job to satisfy the instructor, quit and remain unemployed until the instructor discovered it, and then take another job for a few weeks, holding that job only until he though he could safely quit again. While

this process was unquestionalby the exception rather than the rule, it does suggest the kind of problem that faces an instructor attempting to supervise the seminar practicum employment experience. One firm rule is that student employment for the required 15 hours will not be permitted at sites close to the student's home but too far from the campus for convenient supervision by the instructor (which occurred in the past year in one case, that of a student who did not successfully complete the program).

Another important lesson offered by instructors' reactions is the absolute need in the seminar practicum for homework assignments that test the students' self-instructional work and for quizzes at the start of class that reinforce that self-testing.

All three instructors, while generally favorable on the subject, expressed concern about the degree to which relatively loose standards in industry experience could be offset by the standards suggested in the self-instructional modules and reinforced in the classroom. The function of the classroom and modules of showing the student that there <u>is</u> such a thing as a world that "works right" was found to be one which could be reinforced by field trips showing <u>all</u> students where management techniques advocated in the modules and class were actually in practice--even if not in all of the practicum sites.

Instructors found it difficult to assess the employer's evaluation of the student for its meaning and accuracy because of relatively infrequent (one every two or three weeks) and fleeting contact with employers and supervisors. Thus, a go-no go basis (if employed, okay; if not employed, not okay) turns out to be the operating and somewhat unselective criterion for assessing employer evaluation.

Difficulties encountered with employers principally related to their tendency to add hours to students' schedules if the student did not resist. Some operations proved to have standards of operation which simply proved unacceptable. In these cases, student employee turnover was seen as positive rather than negative in all cases.

In some cases, instructors' conversation with employers had an awkward element because the employer was not using the techniques (particularly in the area of pre-costing, payroll control, scheduling, and food cost post control) that the student was studying. The absence of such controls from the employment place also posed a problem in the classroom and the strategy which has been adopted by the faculty has been to point out quite candidly to the students, both in their first year and very forcefully at the beginning of the seminar practicum in their second year, that the industry in which they are employed is a highly traditionalist industry. Without wishing to demean the industry or the employer, instructors will diplomatically make the point that on some scores, many managers are backward in the use of objective management techniques. This presents a problem of diplomacy for both student and instructor--that is, to note what is being done without offending an employer who is, on balance, undoubtedly successful. The point that the instructor must make is that in some cases, an employer may be successful in spite of rather than because of the techniques the student observes. This contrast with the world of the successful entrepreneur is an especially difficult element in the commercial emphasis in which the "backward" manager drives to and from work in a Cadillac. Candor compels the conclusion that this is a limitation, although not a serious one, of the seminar practicum. It can be contrasted with a

traditional classroom curriculum in which the student does not find out what industry standards are until graduation, at which point many graduates report their complete disillusionament with all they have been taught in a college or university setting.

Learning from the Student

In the early design stage of the development of the system, one of the greatest concerns of the faculty was the reliance of the system on self-instructional devices. The reactions to the questions discussed earlier do not suggest that this concern was particularly important. Moreover, students at the Berks Campus were asked specifically about a course which had been completely self-instructionalized (Sanitation and Housekeeping) and in which no formal class sessions were held (although the instructor maintained office hours to answer questions). Students completed assignments according to a printed set of instructions very much in the manner of a correspondence course except that a special grader was employed to assure very rapid (generally less than a week) turnaround on all student assignments. A surprising 12 out of 14 students expressed general approval of this course. Although eight commented that they would have preferred a classroom setting, the high degree of acceptance of a course taught in this manner, including four students who expressed a preference for the correspondence mode for this particular subject, was surprising. One student expressed indifference and only one student expressed an overall unfavorable response to this particular course.

The Matter of Logistics

In assessing the seminar practicum, it may also be useful to set

the system developed in the context of the logistical problems that confront all institutions wishing to establish an HRI program: problems of faculty load; the cost of equipping a food service laboratory; and the cost of operating food service laboratory courses.

The typical small two-year program (and indeed many four-year programs) operates with only one faculty member teaching all the courses in the major. This requires a heavy teaching load as well as a heavy advising load which impinges either on the instructor's time for class preparation (or on his or her ability to get a good night's sleep). Not only is there a substantial teaching load with respect to the number of class contact hours and courses taught, but there is also the problem of the very wide variety of courses an instructor is expected to be competent to teach.

As an approach to this set of problems, the seminar practicum offers a high degree of predesign. Instructors' manuals will shortly be available which, when taken with the modules, present the instructor with a course on which elaboration becomes possible as time permits but in which a basic strategy is provided until such time as the instructor wishes to improve on it. Since workbook exercises, complete with answers for the instructor, are available, as well as quizzes and exams, a substantial work reduction in these courses becomes possible for the busy instructor. Moreover, granting of credit for learning experiences <u>directed by</u> self-instructional modules and the seminar (as opposed to just the number of class or lab contact hours) reduces somewhat the instructor's class contact as well as class preparation load, although this reduction is somewhat offset by the need to maintain field supervision. The seminar practicum can probably be handled adequately in two and a half contact

hours per week and, at Penn State, is offered for four credits.

A second difficulty with the adoption of an HRI curriculum at an institution not presently equipped for such a curriculum is the need to provide a substantial space allocation for what is generally a single-purpose laboratory as well as the considerable capital investment in equipment. (At Penn State, the equipment, alone, in use in the food service laboratory has an estimated value of $80,000.) While the seminar practicum in a managerially oriented curriculum is seen as having weaknesses in delivering the food production and manipulative skill learning, a "skills signoff sheet" developed by Wayda lists 72 skills to be mastered by the student and requires both student and employer to initial each skill mastered.[9] This insures, as a minimum, that the student will have identified all of the important skills of the food production worker. The fact that both the student and employer indicate acceptable accomplishment in this area encourages one to believe that the motivated student will, indeed, achieve an acceptable level of mastery. Moreover, this mastery is accomplished without lab facilities.

Any weakness in the skills teaching area is inherent in the curricular emphasis in the Hotel and Food Service program at Penn State rather than in the instructional system itself. The addition of a small amount of laboratory space and equipment would permit demonstrations, and limited introductory experience could be gained by the student as well. A greater emphasis on testing the student by the instructor for the achievement of skills and a greater amount of time spent on food production (for instance, two or three terms rather than the one term in the Penn State curriculum) is also a possible strategy, should a

faculty determine that that is the area they wish to stress. The difficulty discussed above, the contrast between the standards of the world of work and the standards the faculty wish to impart, can be offset in a program stressing culinary arts by a greater selectivity in the operation approved for employment and, resources permitting, concomitant closer instructor-employer contact, supplemented by an expanded skills signoff sheet. Indeed, a logical next step in the development of the seminar practicum in hospitality education is its introduction in a culinary arts associate degree curriculum in a large city that offers an adequate number of practicum sites in which culinary standards are high enough to support instruction in that field.

A final logistical difficulty the system addresses is the cost of operating a food service laboratory (as opposed to equipping it). Two sections of an introductory course at Penn State's University Park Campus (four credits) account for all of one faculty member's teaching load. Moreover, the kind of instructor who is competent in food production and, at the same time, has adequate academic preparation and a grasp of the managerial system is, indeed, rare. The employment of a substantial portion of faculty resources to teach a food production course where resources are severely limited may represent a misallocation of scarce resources which the seminar practicum can, in part, overcome by shifting the time consuming skill learning to a field setting. In the case of a culinary program, food production skill standards could quickly be tightened, but it would still be possible for the person coordinating the course to be substantially more productive in terms of student learning outcomes should that person make use of practicum sites acceptable from a culinary arts standpoint.

In an evaluation of logistics, one ought not to exclude a consideration of the students' logistics. Because a student is employed, he or she should expect to earn something on the order of a thousand dollars during the three terms of the second year, (in addition to any summer employment income or first-year part-time employment) assuming a minimum of two dollars per hours. While many college students today do not have to be concerned with the cost of education, a rising number are expressing just such concern and wondering whether continuing their education is economically worthwhile. Reduction in the cost of education occasioned by the seminar practicum may thus be a consideration of some importance to many students. Moreover, in a time when our society has developed a considerable concern for the economically disadvantaged, the reduction in the net cost of education which results from a student income as an integral part of the educational experience deserves note.

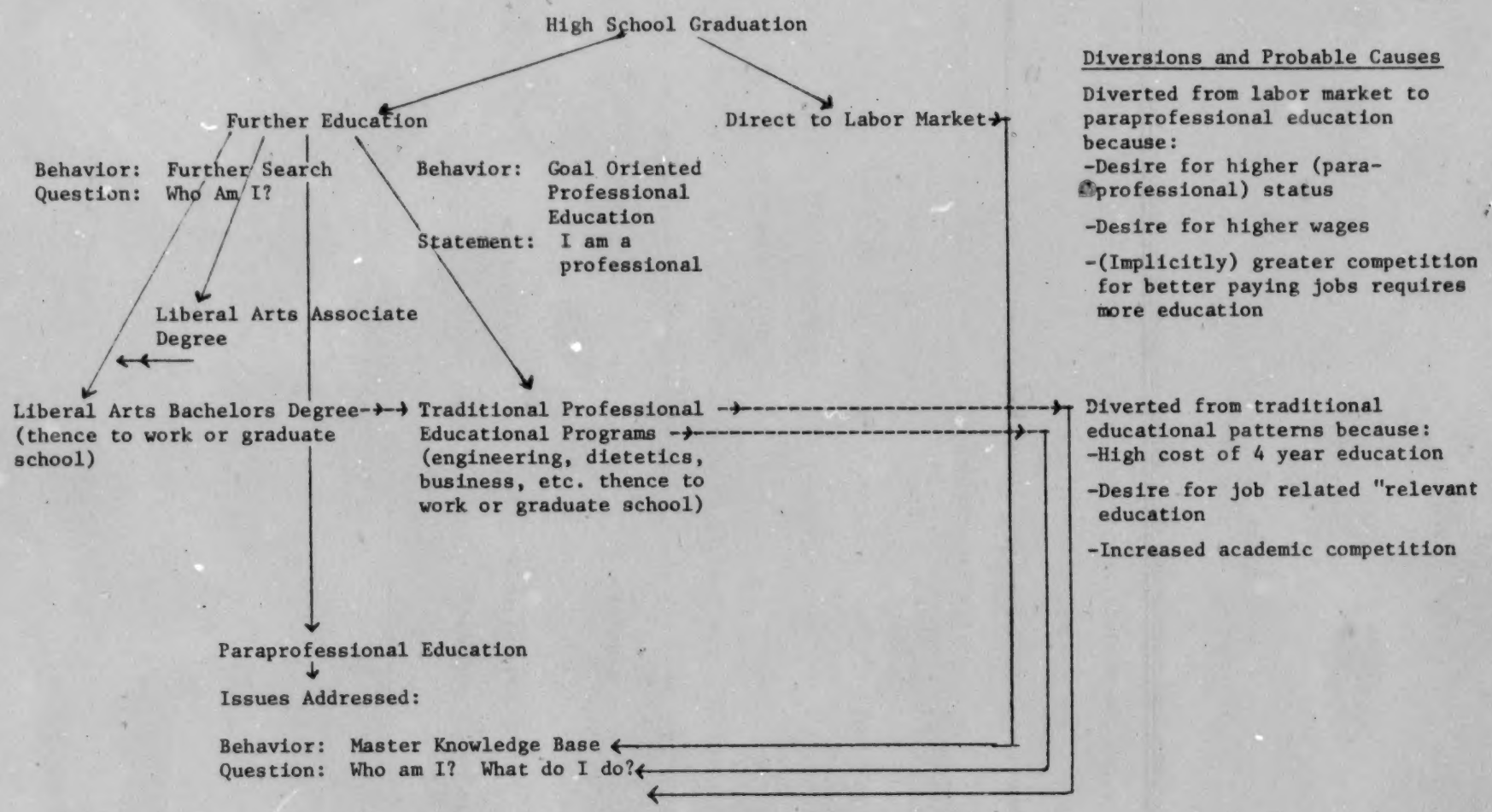
Conclusions

The field experience is clearly an important part of any HRI curriculum. The seminar practicum appears to structure the field experience in a way that results in acculturation of the student to the world of work and significant maturation of the student. Those elements of weakness in the knowledge base coverage cited by students were the result of deliberate choice in curricular emphasis rather than an effect of the instructional system. The system is community based and has succeeded in gaining a very high degree of industry support. The logistical advantages of greater faculty productivity as well as reduced investment and operating costs for HRI programs are important advantages of the system. Finally, the seminar practicum offers the student some part-time income at the same time he or she is gaining a high quality educational experience.

For purpose of orientation, I have included Figure 1, "Educational Options, Old and New" on the following page.

Figure 1

EDUCATIONAL OPTIONS, OLD AND NEW



Notes

1. Peter F. Drucker, The Age of Discontinuity (New York: Harper and Row, 1968).

2. Thomas F. Powers, "The Seminar Practicum: The Knowledge Worker and the Knowledge Base in Hospitality Education," Proceedings of The American Home Economics Association, June, 1973.

3. James B. Hicks, "Application of a Self-Instructional System for Paraprofessionals in Home Economics," Proceedings of the American Home Economics Association, June, 1973.

4. Roger Harrison and Richard L. Hopkins, "The Design of Cross-Cultural Training: An Alternative to the University Model," The Journal of Applied Behavioral Science, Vol. 3; Number 4, 1967.

5. Joseph N. Koppel, Practices in Required Field Experiences in Post Secondary Hotel, Restaurant and Institutional Education, Unpublished Master's Paper, The Pennsylvania State University: June, 1974.

6. Powers, op. cit.

7. The discussion which follows is based on Koppel, op. cit.

8. Hicks, op. cit.

9. Suellen Wayda, "The Development of Self-Instructional Modules For Hospitality Education," Proceedings of the American Home Economics Association, June, 1973.

VIII

THE HOSPITALITY PARAPROFESSIONAL AND THE EXTERNAL DEGREE: WORK IN PROGRESS AND WORK UNDONE

by

Thomas F. Powers, Ph.D.

THE HOSPITALITY PARAPROFESSIONAL AND THE EXTERNAL DEGREE: WORK IN PROGRESS AND WORK UNDONE

Thomas F. Powers, Ph.D.

Introduction

A relatively recent development on the educational scene is the external degree, often called the "University Without Walls." This essay will briefly describe the external degree conceptually and then describe its applicability to hospitality education. Next, the author will discuss an external degree program now being developed at Penn State for health care food service paraprofessionals which is a direct outgrowth of The Pennsylvania State University's Berks Program and serves as a model for non-traditional education programs (i.e., external degree) for Hospitality Education. The essay will conclude with a discussion of the need for an external Associate Degree for hotel and commercial food service paraprofessionals and an upper division external degree for transfer students from all Hospitality Associate Degree programs.

What Is The External Degree?

Several dynamic factors in the American social fabric have led to increasing emphasis on non-traditional study. Principal among these are (1) the high and still escalating costs of education, with traditional education often beyond

the reach of large numbers of students; (2) a desire on the part of adults to improve their level of educational certification, thus increasing their economic or social status or both; and (3) the evolution of the nature of work in our society characterized by Drucker as a shift "from manual to knowledge work."[1]

To serve this need, a number of non-traditional modes of study have been adopted, the best known of which is probably the external degree. As a recent Study Committee Report at The Pennsylvania State University put it,

> The history of education abounds with statements of the needs of adults to continue their education throughout their lives. Society, for the most part has, to date, provided institutionalized educational benefits for children and youth. . . . The only significant difference between external degree programs and their historical precedents is the growing acceptance of continued education for adults and an apparent willingness on the part of society to make a commitment to it.[2]

The Carnegie Commission on Higher Education, in a recent study, recommended that "alternative avenues by which students can earn degrees or complete a major portion of their work for a degree be expanded to increase accessibility of higher education for those to whom it is now unavailable because of work schedules, geographic location,

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[1] Peter F. Drucker, The Age of Discontinuity, (New York: Harper and Row, 1968), p. 287.

[2] Anonymous, "Interim Report on the External Degree." Xerox. The Pennsylvania State University, Part I, p. 5.

or responsibilities in the home."[3] The University of Oklahoma, Syracuse University, Goddard College, the University of South Florida, and others have already implemented external degree programs.[4] Since the Fall of 1971, The State University of New York has concentrated its non-traditional studies in a single institution, The Empire State College.[5] A recent study conducted by the California State Colleges identified ten different models for the external degree ranging from "A program of examination and certification: Instruction not offered" through various kinds of independent study and group and independent study to "The Weekend and/or Evening College."[6]

An external degree has been defined, very broadly, at Penn State as "any degree conferred by The University on persons who do not follow totally the traditional, residential college experience. The degrees would be conferred

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[3] Anonymous, "Less Time, More Options: Education Beyond High School," A Special Report by the Carnegie Commission on Higher Education (New York: McGraw-Hill, January, 1971), p. 20.

[4] Ibid., p. 43.

[5] Gene I. Maeroff, "Empire: Do It Yourself College," New York Times, November 24, 1973, p. 33.

[6] "Various Models for External Degree Programs," The Commission on External Degree Programs, The California State Colleges, mimeo., n.d.

in recognition of satisfactory completion of a prescribed program of learning."[7] The concept of making possible the completion of some or all of a degree program will, effectively, bring the college to the student in those cases where the student cannot, because of geography or family or work commitments, get to a college campus. The experience of the Empire State College of S.U.N.Y. suggests that the clientele of non-traditional study is, indeed, different from the clientele of the traditional college. The average age of Empire State students is 33, two-thirds are married, and only 15 percent are less than 21 years old. Most are employed.[8]

The External Degree and Hospitality Paraprofessionals

The growth of external degree programs has initially been concentrated in the area of the Liberal Arts. Only very recently has this concept been used in the field of applied education. The State University of New York, for instance, is now in the process of developing an external degree in Business Administration.[9] Given that the vast

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[7] "Interim Report," Op. Cit., Part II, p. 5, Working Definition of External Degrees.

[8] Maeroff, Op. Cit., p. 33.

[9] Richard L. Oliker, "An External Degree in Business Administration," Collegian News and Views, Spring, 1972, p. 7.

majority of persons filling the paraprofessional roles (i.e., supervisory and middle management) in the hospitality field at this time are committed, by their income and family circumstances, to fulltime employment, it seems clear that they cannot be expected to participate in courses to enhance their professional development through fulltime study. While those fortunate enough to be located near universities and colleges offering professional studies may be able to enroll part time in courses that suit their needs, their ability to do so is conditioned both on geographic proximity and their ability to fit the class meeting hours into their work and family schedules. Accordingly, it seems reasonably clear that opportunities for self improvement and economic and social advancement for those mature persons who are capable of professional growth can best be provided by an independent study vehicle.

The serious shortage of health care food service managers and supervisors led the Food Service and Housing Administration Program to explore the possibility of elaborating its Hotel and Food Service Degree (Health Care Food Service Emphasis) for delivery by non-traditional means, and the Public Health Service made the funds available in a grant under which work was begun in January, 1973.

The Dietary Technician: A Model For
Paraprofessional External Degrees
in Hospitality Education

Penn State has offered a non-credit course, (INA 900) "Hospital Food Service," since 1957-58 through the correspondence division of the University. In its first year, 1957, this course enrolled 16 students. In 1972, 222 active students were enrolled and 438 students had successfully completed the course. Enrollment continued strong in spite of the fact that the course's text was out of print and, rather than promoting enrollment in the course, the University had discouraged enrollment until such time as it was able to revise its correspondence offerings. In fact, it was, in part, out of the deliberations regarding the revision of INA 900 that ideas for the external degree for Dietary Technicians arose. A review of the single "Hospital Food Service" course revealed the need to gear the study toward the complicated needs of the contemporary environment. It became clear that it was no longer possible to talk about normal diet modifications, personnel management, food production management, and so forth in one "Hospital Food Service Supervisor's Course."

Qualitative Manpower Demand

The potential paraprofessional dietary service supervisors in the existing health facility range from the food production manager, the cafeteria manager, the diet office supervisor, and the patient food service supervisor in large health care establishments to the food service manager in smaller establishments. Generally speaking, persons filling these roles have advanced from positions as cooks and dietary aides or even lower ranks. While such persons often have great ability, they commonly lack academic preparation, which in turn, limits their ability to develop fully the supervisory and middle management roles they fill.

The need was seen for supervisors who could develop their roles so as to become middle managers responsible for patient contact personnel below the dietitian level. Certainly, such persons need an understanding of the principles of normal nutrition and dietary modifications as well as a sound theoretical background in the principles and practices of sanitation. Moreover, it would be most helpful if supervisors were aware of the concept of cost and revenue centers and capable of dealing effectively with the pertinent accounting documents that permit the evaluation of the performance of a cost or revenue center. Such a supervisor would be a more valuable participant in budget planning and in performance review. Similarly, food production planning and supervision can no longer be viewed as some high-level extension of the cooking skill. The

food production work force today must operate within increasingly stringent cost, legal, and social parameters.

The growth in the size and number of health facilities in recent years has substantially raised the demand for administrative sophistication at all levels of management, as have the increasingly complicated financial reporting requirements. This suggests not only a need for more talented persons to do the work of the supervisor, but also a need for the paraprofessional to relieve the dietitian of as many duties as possible so she can assume greater responsibility in the Health Care Delivery System.

The need for college credit courses is suggested by a recent occupational analysis of hospital food service departments conducted by the University of California, Los Angeles. This study indicated that 77 percent of the food production supervisors and 55 percent of the food service supervisors in a representative national sample have not gone beyond the high school level.[10]

The Curriculum

The curriculum developed is basically similar to that described in earlier sections of this report relating to the Berks program, although substantially more biological

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[10] Mima L. Gosman, M.P.H. and C. B. Krishnaumurty, Dr. P. H., Occupational Analysis: Hospital Food Service; Allied Health Professions Project, University of California, (Los Angeles, September, 1971), pp. 14-30.

and nutrition science courses are required. All the instructional materials developed for this external program, however, have been specially prepared with the interests and needs of the health care food service paraprofessional in mind. Consequently, they make very extensive use of hospital and nursing home examples. The curriculum is summarized in Figure 1.

Instructional System Elements

The instructional system, as it will be arrayed when fully completed, is expected to offer great flexibility in order to make possible maximum participation by hospital dietary department staff. Any one or a combination of the courses in the curriculum can be taken for credit toward the Associate Degree. Courses can be taken solely by correspondence. Correspondence study materials would include not only written media, but, in many cases, audio-tape cassettes and film strips.

Present plans call for the correspondence study to be further supplemented by two or more intensive eight-hour classes per course to be held at a time convenient to students as well as by telephone contact between instructor and student. Class sessions and provision for telephone contact would initially be limited to the Commonwealth of Pennsylvania, but provision is made to broaden the area served to include, in time, any portion of the United States in which a significant demand exists for instruction through

arrangements with other accredited academic institutions. Ultimately, we hope to develop extensive video tape cassette support for the system. The availability of intensive classroom sessions and video tape cassettes as well as audio tape cassettes, film strips, and telephone tutorial to supplement the correspondence component of the system will eventually provide a true multi-media instructional system.

Principal Variations Possible Under the Instructional System

Figure 2 indicates the full range of options available to the student wishing to earn the Associate Degree. Such a student may take courses by correspondence; may enroll in courses taught by the enriched multi-media mode; may transfer courses from other colleges and universities; or may earn credit by examination in order to complete the requirements for the Associate Degree.

Options available to the student. Correspondence courses have been offered for academic credit by The Pennsylvania State University since the turn of the century. The correspondence mode of instruction accommodates students whose work and family commitments do not permit them to follow the typical term schedule of the University. Such a student might take several months to complete a course normally offered in a twelve-week term. The same student, during a vacation or some other period of free time, might

complete a course in a single month. The correspondence mode, moreover, is available to students regardless of their geographical location. Some audio-visual support for this type of instruction is possible.

It should be noted that the "correspondence-only" mode of study is intended, ultimately, to be the exceptional student choice, principally intended for students in geographically isolated locations. In the early years of the program, until the full multi-media mode of instruction is available, it will be an important service to students outside the reach of The Pennsylvania State University's Commonwealth Campus System.

Intensive classroom sessions. An additional way in which courses might be offered would make use of The Pennsylvania State University's twenty-two campuses to supplement correspondence materials with two or more intensive (6- to 8-hour) classes. This mode would offer the student the structure of a regular term with examinations and other deadlines. Moreover, the periodic intensive use of the classroom for demonstrations, case discussions, explanations, and so forth, would constitute a substantial enrichment of the student's learning environment. This mode of instruction is not expected to be available in the near future because of current University personnel limitations.

Use of telephone. As a further means of enriching the instructional system, students and instructors will be encouraged to make appointments with each other for periodic conferences to clarify complex points or otherwise deal with problems students are encountering with course materials. Such contact may well include student group conferences made possible by the use of "speaker phones." This service, however, will initially be limited to students within The Pennsylvania State University's statewide telephone network.

Credit by examination. Each course will, in time, be reviewed to determine if credit by examination may be routinely allowed for that course. When a course is considered appropriate for credit by examination, an appropriate examination will be prepared, successful completion of which would give the student credit for that course toward a degree. Credit by examination, a long established medium of earning college credit at Penn State and many other universities, is one means of giving credit for life experiences outside the normal curriculum which also insures maintenance of the educational standards of the degree program.

Transfer of credits. Credits earned in other accredited institutions of higher education will be applied toward the degree in accordance with the applicable rules of The Pennsylvania State University.

Use of Instructional Vehicle by Other Institutions of Higher Education

While the mixed media and telephone contact will initially be limited to persons within the Commonwealth of Pennsylvania, it is hoped that the program will eventually be made widely available for adoption by institutions in other states.

At least three levels of adoption are presently foreseen:

(a) An institution which grants external degrees may choose to adopt the curriculum, instructional materials and methods developed by The Pennsylvania State University.

(b) In a state where the appropriate external degree program is not offered and significant demand for multi-media instruction is found to exist, The Pennsylvania State University may offer the correspondence component of the instructional system and contract with the Continuing Education Division of one or more institutions in that state to provide the requisite intensive classroom experiences and student-instructor contact by telephone. In this case, Penn State would grant both credit for completion of the course and the Associate Degree for completing the approved program of study. Faculty from such institutions would be invited to participate in workshops and seminars to prepare them for their instructional roles.

(c) An institution which presently grants external degress may adopt part of the materials whose development is here proposed; adapt other parts; or, develop other courses which more conveniently fit that institution's needs.

The Program to Date

Five courses will be ready for delivery during Fall term, 1974. The courses being prepared and their preparation status are summarized in Figure 3. These courses constitute a basic component of the Associate Degree, but they can also be used to satisfy recently mandated educational standards for extended care facility managers.

The "Dietary Assistant"[11]

An initial "90-hour" (clock hours of instruction) certificate (Level 1) is now required for food service managers in extended care facilities. A second level, involving a "one-year certificate" (Level II), is also recognized by the regulations, and the time seems not far off when this will be the minimum requirement. An excellent

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[11] The discussion of the proposed Dietary Assistant role follows closely Thomas F. Powers, "The Dietary Technician: Paraprofessional as Knowledge Worker," Journal of the American Dietetic Association (August, 1974).

Figure 1

Associate Degree Curriculum

I.	General Education Requirements	
	A. Communication Skills	9
	6 credits in English and including 3 in Speech 200	
	B. Arts, Humanities, Social and Behavioral Sciences	12
	With at least 3 credits in Economics	
	C. Physical Education	2
		23
II.	Requirements for the Major	
	A. General	15
	Summer Field Experience (1 cr.) Food and Labor Management and Control (3 cr.), Food Production Problems (4 cr.), Food Production Systems (4 cr.) and 3 credits in accounting.	
	B. Specialization	30
	Students may select an emphasis in Hospitality Administration or Health Facilities Food Service Management	
		68

Figure 2.

POSSIBLE COMPONENTS OF A PROGRAM OF STUDY
LEADING TO AN ASSOCIATE DEGREE

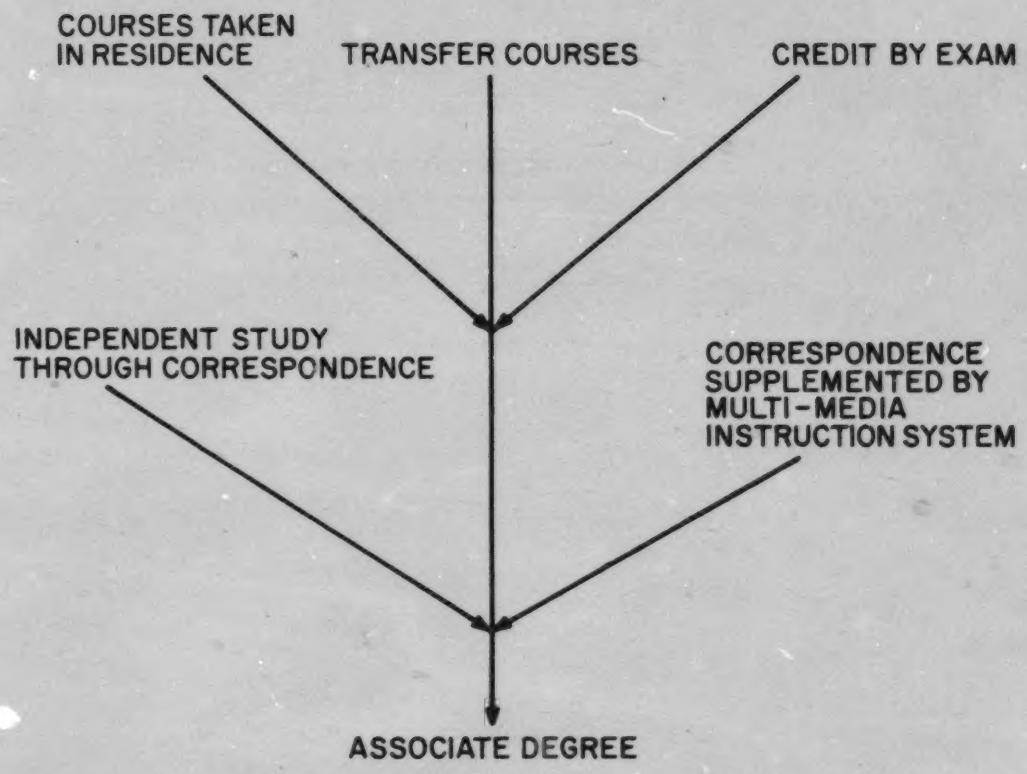

Figure 3

Courses to be Prepared for Correspondence

FSHA 50	In-Serving Training**
FSHA 103	Introduction to Hospital Food Services*
FSHA 225	Food and Labor Management and Control**
FSHA 320	Hospitality Industry Equipment and Utilities**
HFS 802	Sanitation and Housekeeping*
HFS 805	Training and Supervision*
HFS 850	Food Delivery Systems*
HFS 860	Food Service Supervision*
HFS 875	Hospital Food Operating Systems**
HPA 101	Introduction to Medical Care Organization***
NUTR 800	Normal Diet Modification*
NUTR 801	Nutrition and Health**

---

*Expected to be ready Fall term, 1974.

**Expected completion in 1975.

***Expected completion in 1976.

way to meet these requirements is through the external or non-traditional educational delivery system. This model of response to these requirements permits educators to follow a strategy of articulation in the courses that are offered to fill these requirements; that is, to develop programs which have value in and of themselves but which also "fit" into the next higher level of educational attainment. Thus, we would recommend the "90-hour certificate" concentrate on the "nuts and bolts" of food service management--food production, food products, purchasing, pre-costing, portion control, historical food cost control, employee scheduling, and payroll control. The "one-year certificate" might then incorporate those courses and go on to address the issues of managing people as well as the general and specialized issues in the field of nutrition and nutrition care. All but one of these courses will be available this fall through correspondence. The relationship of these courses to the complete curriculum is summarized in Figure 4 while the relationship of the courses to the knowledge base is summarized in Figure 5.

By leaving general education courses until later, we concentrate on work-related studies--and recognize the student's improved work qualifications by conferring a certificate. At the point of earning the "one-year certificate," ideally the students will be motivated enough to undertake what such students often perceive as "useless" general education courses as well as advanced professional

Figure 4

Career Progression Through Articulation:

Levels of Paraprofessional Development

Technician -

Communication Skills English, Speech	9 credits	48 credits
Behavioral Sciences Sociology, Psychology Economics	9 credits*	
Advanced Administrative Courses	18 credits*	
Medical Care Organization, Accounting, Maintenance, Food Service Systems and Food Merchandising		
Applied Physical Science Psysiology, Sanitation	6 credits*	
Elective & Miscellaneous		

*In addition to courses already completed in this general subject matter area (See Levels I & II).

Level II-

Managing People	HFS 805	9 credits
Nutrition - General	NUTR 801*, 150, or 351	
Nutrition - Specialized	NUTR 800	

*Nutrition 801 is expected to be available early in 1975.

Level I -

Food Production Problems	HFS 850	11 credits
Food Production Management	HFS 860	
Introduction to Health Care Food Service Management	FSHA 103	

Note: The time ordering of the curriculum has been altered, in the external model presented here, to offer HFS 850 and 860 <u>first</u> rather than in the latter stages to accommodate the needs of external students who are seen as mature, employed individuals in need of immediately functional learning experiences rather than, as in resident education, young students needing a heavy dose of introductory experience.

Figure 5

Segments of the Knowledge Base Addressed

In Less-Than-Technician Educational Offerings

Level	Subject Matter	Course Number	Course Name	Credits
90 Hour Certificate (8-10 credits)	Food Production	HFS 850	Food Production Problems	4
		HFS 860	Food Production Management	4
	Orientation to Management and the Professional Environment	FSHA 103	Introduction to Hospital Food Service	3
				11
One Year Certificate (18-19 credits)	NOTE; INCLUDES ALL OF ABOVE			
	Managing People	HFS 805	Training and Supervisory	3
	Nutrition--General	One of NUTR 801*	Nutrition and Menu Planning	3
		or		or
		NUTR 351	Nutrition of the Family	3
		or		or
		NUTR 150	Elementary Nutrition	2
	Nutrition--Specialized	Plus one of NUTR 800	Normal Diet Modification	3
		**	Child Nutrition	or 3
		**	Community Nutrition	or 3
				19-20

*Nutrition 801 is expected to be ready by early 1975.

**This course is not offered nor contemplated at PSU and is included by way of indicating some of the directions in which other associate degree might move now or at some point in the future.

courses to complete the Associate Degree. The point of this model is that the proposed certificate is given for completion of the technical-professional content of a first year of study rather than for all credits required for a year's academic work.

Articulation of paraprofessional curricula. Considering the motivational importance of the strategy of articulation which offers a student who completes one level of work full credit for that work as a part of moving toward the next level of certification, the time may now have come to reconsider the qualifications of the Dietary Assistant, a supervisory title presently connoting a rather minimal educational achievement. As now constituted, the requirements for this certification are completion of one-credit correspondence course and membership in the Hospital, Institutional and Educational Food Service Society (H.I.E.F.S.S.) At the time the Dietary Assistant title was first offered, it constituted a significant step forward, and Penn State is proud of the part that its non-credit "Hospital Food Service Administration" (INA 900) played in this development. But we know, too, that we have had a great number of requests from students for further courses and that the students express interest in the articulation of their studies with a higher, multi-course level of achievement.

It seems appropriate therefore to consider a reassessment of the qualifications of the Dietary Assistant. Should not this paraprofessional designation be reserved for a significant educational achievement that is articulated with the technician? An appropriate possibility might be the title Dietary Assistant in place of what was earlier referred to as a "90-hour certificate" (Level I). In turn, the "One-Year Certificate" (Level II) might be titled "Dietary Supervisor" (or some other appropriate title). Thus the Dietary Assistant would be a significant step in and of itself, and at the same time, it would be a "half-way mark" toward the higher "Dietary Supervisor" status. Thus, each level is at once an achievement and an inducement to further study, self development, and achievement.

The model of articulation with maximum flexibility in its delivery not only offers advantages to the developing worker but also the hope of an adequate supply of knowledge workers to staff the challenging positions opening in an evolving health care food service system.

Work Undone

The development of the Dietary Technician program is clearly only a beginning of the work that must be done which, however, may be usefully viewed as a working model for a part of that work. There is a need to adapt the work done on the Associate Degree for Dietary Technicians to a hotel and commercial food service context, providing a series

of articulated steps to the Associate Degree. A pressing need exists within the Commonwealth and the nation at large to accommodate transfer students from a wide variety of hospitality education Associate Degree programs who wish to earn a Bachelor's Degree.

An External Associate Degree for Industry

It is at once the strength and weakness of the correspondence courses developed or under development for health care food service that they have been written to interest a special body of students and are full of highly specialized examples. Because the instructional objectives have been determined and are, for the most part, generalizable, the preparation of the Hotel and Food Service degree for external careers should not require nearly as much funding (approximately $117,000 direct costs for correspondence media development only) or time (three years for preparation of correspondence media only).

There is clearly a demand for correspondence study in this area on the part of employees of all levels of the hotel and food service industries. The American Hotel/Motel Educational Institute developed a series of correspondence courses several years ago. These courses are offered by that Institute and have also been licensed to be offered by the LaSalle Extension University, a commercial correspondence school. A recent communication from LaSalle listed 21

individual courses. The long established Lewis Hotel School also offers correspondence study in hotel management. Some four years ago, the National Institute for the Food Service Industry began preparation of courses and has recently begin offering courses by correspondence. In addition to these programs, there are a number of commercial programs in hotel-motel management advertised in the trade press which are reported to be quite expensive (and often of indifferent quality).

While there will always be a need for non-credit correspondence courses, it should be emphasized that none of the courses offer college credit. Moreover, the most prestigious of the correspondence courses are prepared and administered by employer-sponsored organizations that may, quite legitimately, have an interest in training within rather narrow career aims. Such programs undoubtedly have great merit as employee and management development programs, but the best--and from the employee's (student's) point of view, the most portable--"certification" in today's society is a recognized degree from an accredited institution. Thus, an external degree may best suit the needs of many students, as differentiated from the interests of employers.

That there is a specific demand for degree-oriented correspondence study is clearly indicated by a communication recently received from the LaSalle Extension University which said, regarding their hotel-motel courses, in part,

> ". . . we have been receiving requests from students and graduates who wish to receive academic credit for LaSalle's course and enter a two- or four-year degree granting college or university where they can major in hotel and restaurant administration."[12]

Clearly, there is an advantage to a program of study which is flexible enough to offer the student possibilities for articulation as his own professional development progresses.

Articulation: The Need for an Upper Division Degree

There can be no question of the demand for an upper division degree within the Commonwealth of Pennsylvania.

A Pennsylvania view. The Food Service and Housing Administration Program at this University has received numerous requests in recent years from both institutions and individuals for information on transfer to its baccalaureate program, and in April, 1973, a statewide meeting of Hospitality Educators was held, with nine two-year program chairmen from the Commonwealth in attendance, for the specific purpose of discussing, "What state and advanced institutions need for transferability."[13] Unfortunately the question of transfer raises several problems.

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[12] Letter from Virginia K. Buck, Administrator L.E.U. Hospitality Programs, December 20, 1973.

[13] Letter from Vivian Moon, Williamsport Community College, April 3, 1973.

First of all, many two-year programs are designated as terminal programs by their own institution. Quite understandably, the Academic Senate of this University has directed that the University's admissions office view as acceptable transfer programs only those that are so viewed by their own institution. Since Penn State is the only accredited four-year institution in the state that offers a program of study for students interested in commercial food service and hotel administration, students with that interest must go to institutions in other states, suffering transportation costs, paying out of state tuition, and encouraging potential management people needed in this state to set down roots elsewhere.

An upper division degree. A number of four-year institutions accept transfers from accredited two-year Hotel and Restaurant Programs regardless of the transfer or non-transfer designation of the associate degree. One such program, at Florida International University, offers only an upper division degree for transfer students. From the point of view of Pennsylvania students, however, these programs have the disadvantage of high, out of state (or private school) tuition. More fundamentally, they speak only to the interests of those students--generally young and usually unencumbered by family responsibilities--who can afford enrollment in a fulltime, resident program of studies. Many two-year program students enter the work

force, achieve responsible positions, accept family responsibilities, and then find themselves at once interested in further study and unable to afford either a move to a four-year institution or a leave from their fulltime employment. While no empirical data is available on the number of such potential enrollees, this writer's personal experience, including inquiries from people in the trade, leads him to conclude that the demand would be significant.

In addition to the advantage of service to both students and the industry, the development of an upper division degree offers two further potential advantages: First of all, one problem for transfer programs is the heterogeneity of two-year hospitality curricula. While diversity encourages a student to take advantage of special faculty talents and local needs, the development of an upper division degree with some limited but definite standards of admission might reduce curricular chaos in the field to reasonable order within the boundaries of respect for each institution's academic integrity.

Upper division degree: an external format. Second, and perhaps more important, the development of an external upper division degree, which must be accomplished in concert with interested two-year faculty, would present both a curriculum pattern and instructional media which could also be adopted by one or more Pennsylvania four-year institutions for delivery by resident instruction. This tactic would

meet the needs of many younger Pennsylvania residents for a campus setting in which to complete a desired four-year degree. Given the shortage of qualified faculty and of resources to mount programs, it seems desirable to concentrate the developmental effort at one institution with subsequent delivery having flexibility in terms of sites and continuing development.

Any upper division degree should meet the needs not only of students with a commercial interest but also the needs of students interested in health care settings.

Conclusion

The external degree meets the needs of students of mature years with family and job responsibilities, facilitating personal and professional growth on a flexible time scale. A promising beginning is being made in the health care food service field with an external degree developed for the Dietary Technician. Much remains to be done, however, to meet the needs both of potential students with commercial interests at the two-year level and all graduates of two-year programs in a curriculum designed for upper division students.

IX

POLICY ISSUES IN PARAPROFESSIONAL EDUCATION

by

Thomas F. Powers, Ph.D.

POLICY ISSUES IN PARAPROFESSIONAL EDUCATION

by

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> [F]rom the bottom half of the social ladder less than half the men and a third of the women in the second ability quintile went to college in 1960.... It is among these students that there is currently most room for missionary work, assuming anyone can be interested in such unglamorous potential converts.
>
> The Academic Revolution
> Jencks and Reisman, p. 131

Introduction

In an earlier time, the lot of the less than brilliant offspring of humble circumstances was determined by a labor market which valued skills and by social institutions structured to impart skills--apprentice programs, vocational training offered in educational institutions and, indeed, the school of hard knocks. Whatever the process, the usable output was defined by traditional roles: butcher, baker, candlestick maker--not to say plumber, draftsman, or chef. These occupations are still very much with us but, as Peter Drucker has pointed out, the most important element in work has gradually shifted from skill to knowledge. Knowledge attaches itself to new roles, organizing them and defining new realities. As educators perceive shifting demands in the market place, curricula tailored to the needs of new work roles spring up to prepare and "qualify" new entrants.

As educators respond to the immediacies of their own circumstances,

designing the educational "machinery" to produce the needed "product," they concern themselves with soundness of curricular strategies, the content of courses, the media or instructional technique most appropriate to the task, and the like. Without consciously recognizing it, however, such educators are today--probably to a greater degree than at any time in history--shaping the contingencies and values of tomorrow's labor markets and, indeed, tomorrow's world. Beyond the horizons of each one's discipline, profession, or problem area lie the issues of a system design for a society that is implicitly shaped by seemingly independent curricular and professional certification decisions which are responding to some common need for what Drucker called "Knowledge Workers." The appropriate response of educators and of educational institutions calls for a creative response to the long range welfare of society as well as to the immediacies of their own or their profession's situation. All too often, it seems, the response is merely adaptive, focusing on immediate problems, narrowly perceived, because the more fundamental, societal questions have not been examined.

What, for instance are the implications for a democratic society of an educated work force whose competencies have been narrowly defined and who have been told that "What goes on outside the lab (or whatever professional confine) is none of your business"? What, on the other hand, are the potential cultural effects of the growth of a class of "ancillary people"? Where will their children look to find the horizon, the frontier, the meaning of life and hope? Educators must accept the fact that historians of a future time may trace the answer to these and similar questions to the system design implicit in the way education evolves to meet the needs--perceived and otherwise--of our times.

Members of a "Working Caste"

Certainly, there are less global, more specific issues to be addressed as well. A first issue was raised by a colleague who, looking at an early draft of a proposal to shape a paraprofessional educational program (at the point at which the proposal spoke of career paths for graduates) asked: "Are you making Betas and Deltas?" Huxley's world--never too far from the reality of our own--is one in which people are "manufactured" for specific roles. Certainly the caste implications of curriculum design can be exaggerated but in more than one proposal, one sees the "need" for a paraprofessional role described in terms of the needs of the professional with whom they are to work. The professional's personal role mobility, it may be said, is stymied by a lack of qualified supportive personnel. The prescription--development of a paraprofessional role--consigns (or could) one group of workers to support the advancement of another. The effects of widespread adoption of an exploitive model of manpower development in a competitive--some would say greedy--society ought, perhaps, to be viewed as an augury of a developing caste system rather than as a strategy of manpower development. In an earlier time, Dickens described a single purpose people--"the hands" in an English factory town.

> [T]he multitude of Coketown, generically called "the Hands" [were] a race who would have found more favour with some people if Providence had seen fit to make them only hands, or, like the lower creatures of the seashore, only hands and stomachs.
>
> Hard Times Chapter X

The same issue may be approached from a positive view. When one

looks at subordinated roles in the service industries in the commercial sector--and here the writer reports his own impressions--the subordination is commonly viewed by the role occupant as a part of an invidious system. Thus a bartender, though often very well paid, views his lot with some bitterness: he is "held down." On the other hand, analogous positions in the work force of a hospital seem to partake of a more positive content. By their very uniforms, health care paraprofessionals are clearly subordinated to others in the system and yet seem to accept their role-designation with pride. It may well be that man wants (needs?) an ordered social structure which has both positive and negative social and cultural parameters and reinforcers. In this context, the development of the paraprofessional may be thought of as the beginning, not of a caste system,but the resurrection of a more flexible guild system in which role identification contains a healthy dose of positive content: "This is who I am" (by function) rather than "Those are they than whom I am less."

Paraprofessionalism and Minority Advancement

In any case, the meaning of paraprofessional roles offers grounds for other speculations on social effect. To what degree can or should paraprofessional educational programs be useful, conscious tools for the advancement of members of disadvantaged and minority groups in their search to find a place in the "credentials society." Certainly the potential for an important, positive contribution is there, but when one views the prejudice against occupationally oriented education programs in many Black Colleges, the problem of acceptance of such programs as a part of higher education becomes poignantly clear.

The curricular models of paraprofessional development which are adopted have some basic social implications. Should the knowledge base be defined as separated by its end use? Thus, for instance, the concerns of nurse and doctor have much in common. Should curricula be designed to "ensure" non-transferability so that the nurses, in order to progress to the doctors' level of certification must begin the professional educational process virtually at the beginning? A less dramatic or extreme example presents itself today in the field of dietetics. Government requirements are about to be established which specify a minimum educational requirement (90 hours) for food service managers in extended care facilities. A number of programs are being designed to take care of this educational requirement as an end in itself--in spite of the fact that this requirement will almost certainly be doubled, and very probably re-doubled, within five years. An articulated strategy is clearly called for, and the implications of "dead end training" are hidden beneath the immediacy of today's requirements, created by government fiat.

Economic Implications of Paraprofessionalism

Certainly, the economic issues in paraprofessional education cannot be ignored. On the one hand, the new "knowledge worker," paraprofessional or whatever, is needed to permit the economy to move on to some better ground (whether toward greater output or toward "improved output" in the sense of less despoiling technologies is another issue). Nuclear energy brings not only nuclear physicists but nuclear engineers and, in due time, nuclear engineering technologists. The delivery of the benefit of new knowledge is dependent upon people who can use the knowledge to

make things go. If educational institutions don't supply such manpower, that work will be left to industry. But since there is a demand for the output, this educational work will be done.

Paraprofessionalism and Changing Work Roles

On the other hand, what of the technician in a time of change? When the "Watzits Technologist" finds "Whatzits" replaced by an evolution to "Whozits" and his employment threatened by "Whozits Technologists" (for a real world example talk to an older dietician about the now emerging role of the dietary technician), there are three possible courses of action. Society can accommodate change, in the case of growth, simply by adding new people. In the more complex case of change in work role content, however, society must choose between substitution of people--newly trained entrants to the workforce displacing those whose skills have become outmoded--or retraining of people. Models of continuing education have emerged to keep professionals current, but we may be faced with the need for complete "retooling" of paraprofessionals as the development of their fields change. As a bare minimum, our curricula should contain the means for frequent warnings of this possible future need for continued education. More fundamentally, perhaps the tidiness of paraprofessional curricula time spans of a year or two--which certainly help in "marketing" them--should be done away with in the interests of an honest recognition that the reality is probably two ($\pm$) years plus X hours per year every year beginning three ($\pm$) years after graduation. Such a recognition would perhaps make explicit the need for curriculum design extending after graduation. This could make the planning of those "X hours" less a

matter of counting and more a matter of directing.

The Educator's Responsibilities

Finally, and more fundamentally, what are the responsibilities of educators to the student as a person in this process of "manpower development"? In the industrial model, at least, the issues are clear: We, the company, will train you for this job because we need somebody who can do this work for the company to make a profit. What, however, of the educator who becomes, in some respects, a surrogate for industry, offering education conditioned by market demand. Some may see this as an unacceptable role; others will accept such a role as one which only educational institutions can discharge responsibly. Certainly the student's interest must be seen as separate from--and superior to--the needs of industry. That this "student first" attitude is predominant now is open to question; in fact, one may wonder to what degree it is a conscious issue for some engaged in paraprofessional education.

Conclusion

What is intended here is not a laundry list of the problems of a new and still devloping field, but a suggestion of areas that need conscious exploration. No one has ever been able to "study away" a moral or social dilemma. On the other hand, present practice leads educators to face such dilemmas alone, in the light of their own experience and professional interests. The issues for social change implicit in occupational education ought to be made explicit. The consequences of "growing like Topsy" are all around us. The development of at least a definition of the policy issues constitutes an important first step. Development of the outlines of argument on the

issues delineated and the presentation of consensus and discensus to colleagues for examination, further study and, hopefully, positive further thought should follow logically.

The development of the knowledge worker, the paraprofessional (or if you prefer Galbraith's term, the "semi-professional") is, happily, a process which has only just begun. The educational models developing may follow exploitive models appropriate to educational colonialism. Dead end training for "supportive roles" follow the plantation paradign: the dilemma of the slave was that there was no way off the plantation. Recognition of the longterm effect of curricula supporting closed systems may constitute the strongest single argument for a strategy of articulation and more careful thought to the base for growth provided in paraprofessional curriculum design. Certainly, the only institutions in our society that are likely to address these issues--and be able to act to effect their outcome--with a view to the more general considerations of the common good are those of education. It remains only for the issues to obtain a hearing which will earn a place for them on the agenda of the higher education community.

ACCESSION NUMBER: VT102366

PUBLICATION DATE: JUN75

TITLE: AN ANNOTATED BIBLIOGRAPHY OF INSTRUCTIONAL MATERIALS WHICH EMPHASIZE WORK ETHICS.

PERSONAL AUTHOR: CURRY, CHARLES

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *WORK ATTITUDES; *MEDIA SELECTION; *INSTRUCTIONAL MATERIALS; ETHICAL VALUES

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 122P.; RELATED DOCUMENT VT 102 365 IN THIS ISSUE.

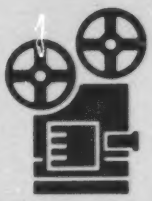
ABSTRACT: ANNOTATED BIBLIOGRAPHY ISSUED AS THE RESULT OF A MEDIA SELECTION SURVEY, VT 102 365 IN THIS ISSUE. THE PROJECT WAS DESIGNED TO COMPILE, EVALUATE, AND ORGANIZE TITLES AND SOURCES OF INSTRUCTIONAL MATERIALS DEALING WITH SUBJECTS RELATED TO POSITIVE WORK ATTITUDES. SUBJECT MATERIAL INCLUDES PRIDE IN GOOD WORKMANSHIP, GETTING AND HOLDING A JOB, ETHICAL CONDUCT, REASONS FOR WORKING, REALISTIC SELF-IMAGE, JOB SATISFACTION, OCCUPATIONAL CHOICE, AND CAREER ADVANCEMENT. TYPES OF MATERIAL AVAILABLE ARE BOOKS, FILMS, SLIDES AND FILM STRIPS, AND RECORDS. THE INTENDED AUDIENCE RANGE INCLUDES PRE-K THROUGH ADULTS, HANDICAPPED AND NONHANDICAPPED, DISADVANTAGED, TEACHERS, TEACHER EDUCATORS, GUIDANCE PERSONNEL, ADMINISTRATORS, AND STAFF PERSONNEL. (KJ)

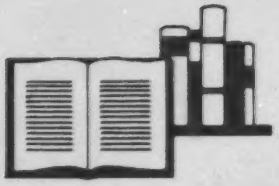
INSTITUTION NAME: VIRGINIA POLYTECHNIC INST. AND STATE UNIV., BLACKSBURG. DEPT. OF AGRICULTURAL EDUCATION.

SPONSORING AGENCY NAME: VIRGINIA STATE DEPT. OF EDUCATION, RICHMOND. DIV. OF VOCATIONAL EDUCATION.; OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

VT 102 366

An Annotated Bibliography Of Instructional Materials Which Emphasize Positive Work Ethics





VT 102 366

AN ANNOTATED BIBLIOGRAPHY OF INSTRUCTIONAL MATERIALS WHICH EMPHASIZE POSITIVE WORK ETHICS

CONDUCTED UNDER PART C OF PUBLIC LAW 90-576

Prepared by:

Charles Curry
Project Coordinator

Program of Agricultural Education
Division of Vocational and Technical Education
College of Education
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061

In Cooperation with

Division of Vocational Education
State Department of Education
Richmond, Virginia 23216

June 1975

ACKNOWLEDGMENTS

The contributions of a number of individuals are to be acknowledged in the development of this publication. Without the efforts of persons who are interested in the development of positive work attitudes within young people and who prepared the enclosed instructional materials, such a bibliography would not have been possible. In addition, the cooperation received from those persons who submitted instructional materials for inclusion in the bibliography made the development of it an easier task and the content more complete.

Special appreciation is extended to Amy Bradner and the staff of the Virginia State Department of Education Media Center for their cooperation in identifying prospective instructional materials. Extraordinary guidance and direction was given by Julio J. Jimenez in the printing of this publication. In addition to these persons, the project staff has made valuable contributions to establishing, conducting, organizing and evaluating this phase of the work ethics instructional materials project. These dedicated persons include:

Lloyd M. Jewell, Jr.
Coordinator, Vocational Education
Research and Statistical Information
Virginia State Department of Education

Larry E. Miller
Project Consultant
Program of Agricultural Education
Virginia Polytechnic Institute and
State University

Brenda Carr
Laboratory Assistant
Virginia Polytechnic Institute and
State University

Betty McClellan
Laboratory Assistant and Typist
Virginia Polytechnic Institute and
State University

FOREWORD

This document contains an annotated bibliography of instructional materials that are available in the area of work ethics. It has been prepared in accordance with the first phase of a research project entitled "A Compilation, Preparation and Distribution of Instructional Materials that Emphasize Positive Work Ethics in Relation to Occupational Choice." The project was conducted in cooperation with the Virginia Division of Vocational Education and under part C of Public Law 90-576. This project was designed to compile, evaluate and organize titles and sources of instructional materials which deal with subjects related to work ethics.

Vocational teacher education departments, curriculum development centers, research coordinating units, representatives of the National Network for Curriculum Coordination in Vocational Education, state departments of education and other selected vocational education agencies were contacted to obtain titles and sources of instructional materials. In order to compile the materials which have been prepared that emphasize positive work ethics, 343 instruments were mailed to collect data. After the initial mailing and one follow-up letter, 166 of these instruments were returned resulting in 106 prospective instructional materials. A search of the Virginia State Department of Education Media Center in Richmond, Virginia netted 34 additional materials for a total of 140 prospective titles of instructional materials which emphasize positive work ethics.

These materials were reviewed and an attempt was made to include only those materials which dealt specifically with developing pride in good workmanship, job attainment and holding power, occupational decision-making, self-image, ethical conduct, career advancement, reasons for working, and potential job satisfaction. An attempt was also made to exclude those broadly based materials which might be more applicable to the concepts of career awareness, orientation, exploration or preparation and which did not deal specifically with the development of attitudes toward work.

This bibliography has been designed for ease in reading to expedite the identification of instructional materials. These materials should help classroom teachers become more effective in teaching positive attitudes toward the world of work. Information for ordering each of the 56 instructional materials is included along with a comprehensive description of each. Vocational teachers are encouraged to contact the project coordinator if further information is desired. Sample copies of most of the materials included in the bibliography are shelved in the office of the Program of Agricultural Education at Virginia Polytechnic Institute and State University and are subject to review by vocational educators.

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WORK ETHIC

INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Basic Social and Education Competencies Essential for Initial and Continued Employment in Agricultural Occupations
DATE OF DEVELOPMENT AND/OR REVISION	1966
NAME OF DEVELOPER(S)	L. P. Jacks

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☒ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☒ Career Advancement ☐ Other

TYPE OF MATERIAL: ☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 66 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult
☒ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator ( ) pre-service (x) in-service
☐ State Personnel ☐ Local Administrators ☒ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: Free -- Limited number on hand

☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☒ Free

Other–Explain: _____

TO ORDER, PLEASE CONTACT: Lousiana State University, School of Vocational Education, 208 Stubbs Hall, Baton Rouge, Louisiana 70803

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

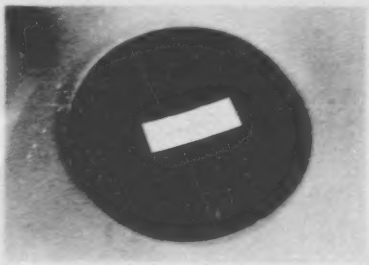
This publication was designed for use by students of agriculture at the junior and senior high school level in making them aware of certain basic social and educational competencies essential for initial and continued employment. Emphasis is placed upon four areas: personal qualities and job success; basic educational competencies and job success; job requirements; and job procurement.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charlie M. Curtis, Director
	AGENCY:	School of Vocational Education Louisiana State University
	ADDRESS:	208 Stubbs Hall
		Baton Rouge, LA PHONE: 388-5748

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Belton, Jerald F
DATE OF DEVELOPMENT AND/OR REVISION	1972
NAME OF DEVELOPER(S)	Dr. William Barron, Dean of Division of Extension, Univ. of Texas Austin, Texas 78712



SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☒ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☒ Film 29 Minutes (no.) ( ) B & W (x) Color 16 Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult ☒ Teacher ☒ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☒ Guidance Personnel ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☒ Yes ☐ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☒ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 150.00) ☒ Rent (Unit Cost $_____) ☐ Free

Other–Explain: _____

TO ORDER, PLEASE CONTACT: Ken Stedman, Division of Extension, Industrial & Business Training Bureau, University of Texas, Austin, Texas 78701

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

Belton, Jerold F was conceived and designed as a tool for training teachers and counselors working in Adult Basic Education programs. In a broad sense, Belton, Jerold F. is concerned primarily with the roles and relationships of teachers and counselors in the adult education setting. The film is designed to convey to the viewer a sense of the student's complex life situation and portrays the activities of the adult education counselor and teacher in trying to help the student resolve some of his problems.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT

NAME:	Waunda Stedman, Librarian DORD
AGENCY:	Texas Education Agency
ADDRESS:	201 East 11th Street
	Austin, Texas 78701 PHONE: 475-4641

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	The Changing Work Ethic
DATE OF DEVELOPMENT AND/OR REVISION	1973
NAME OF DEVELOPER(S)	Guidance Associates

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☐ Realistic Self-Image ☒ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☒ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☒ Slides and Film Strips ( ) B & W (x) Color; Audio: (x) Yes ( ) No
☒ Audio ( ) Reel ( ) Cassette (x) Records

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☒ 9-10 ☒ 11-12 ☒ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Permission for duplication must be in writing from the publisher.

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 37.50) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: _____

TO ORDER, PLEASE CONTACT: Guidance Associates, 41 Washington Avenue, Pleasantville, New York 10570

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This filmstrip and record package titled "The Changing Work Ethic," is divided into two parts. They are "You and Work" and "Work and Society."

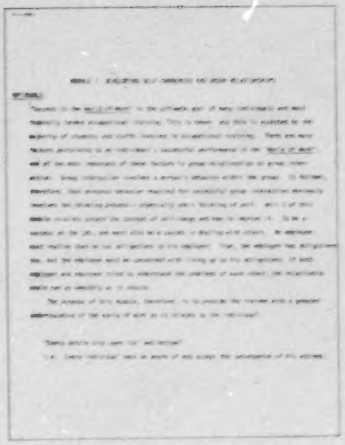
"You and Work," depicts various situations where the work ethics of certain individuals conflict. This is a very good approach to analyzing and constructively changing the eroding work ethic.

This package includes a discussion guide and script.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project, VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Module I Developing Self-Awareness and Group Relationships
DATE OF DEVELOPMENT AND/OR REVISION	Currently in Developmental Progress
NAME OF DEVELOPER(S)	Lawrence Dillon

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☒ Why Work
☐ Getting and Holding a Job ☐ Ethical Conduct ☒ Job Satisfaction
☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL: ☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 43 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☒ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☒ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Information not provided

PROVISIONS FOR ACQUIRING MATERIALS: _____

☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☒ Free

Other–Explain: _____

TO ORDER, PLEASE CONTACT: Lawrence Dillon, Guidance Specialist, Vocational Division, Mississippi Department of Education, Jackson, Mississippi

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This unit contains 8 one hour lessons:

1. Identifying techniques of self image discovery;
2. Identifying techniques of relaxation;
3. Identifying techniques of achieving success;
4. Identifying techniques of replacing negative with positive;
5. Identifying techniques of "being oneself;"
6. Identifying techniques of "living with a crisis;"
7. Identifying techniques for winning friends; and
8. Identifying twelve ways to view a self image.

These 8 one hour lessons are scheduled in the following manner:

1. 5 minutes - Introduction, Objectives and Directions;
2. 10 minutes - Instructor Presentation;
3. 25 minutes - Student Exercises;
4. 10 minutes - Competency testing and grading; and
5. 10 minutes - Class discussion.

Reference materials are included.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE:951-6836

WORK ETHIC

INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	A Developmental Approach to Career Guidance, Counseling and Placement, New Hampshire Guidelines
DATE OF DEVELOPMENT AND/OR REVISION	August 1974
NAME OF DEVELOPER(S)	Counselors and Vocational Educators at Secondary Level

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☒ Realistic Self-Image ☒ Why Work ☒ Getting and Holding a Job ☒ Ethical Conduct ☒ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 100+ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator ( ) pre-service (x) in-service
☐ State Personnel ☐ Local Administrators ☒ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____
☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☒ Free
Other–Explain: Free to those in workshops within state.

TO ORDER, PLEASE CONTACT: Josephine B. Hayslip, Cd. Consultant, New Hampshire State Department of Education, 64 N. Main St., Concord, New Hampshire 03301

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

New Hampshire Guidelines in Career Guidance, Counseling and Placement "emphasizes group approaches in involving counselors, teachers and students in meaningful projects intended to enhance career planning and decision making skills." The guidelines deal with 3 major components: attitudes and values; decision making; and world of work.

"The focus of the model has been on developing a "How to . . ." approach. That is, the model not only details a series of concepts, goals and objectives for implementing career development in the secondary school, but it also suggests a series of activities which may be employed at various levels to carry out planned objectives."

Bibliography, tests, films and filmstrips are included.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Employability Skills
DATE OF DEVELOPMENT AND/OR REVISION	Completion Date July 1975
NAME OF DEVELOPER(S)	Dr. Roger Lambert Dr. Douglas Ray

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☒ Why Work ☒ Getting and Holding a Job ☒ Ethical Conduct ☒ Job Satisfaction ☒ Occupational Choice ☒ Career Advancement ☒ Other

TYPE OF MATERIAL:
- ☐ Hardcopy _____ Pages (no.)
- ☒ Paper Bound _____ Pages (no.)
- ☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
- ☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
- ☒ Slides and Film Strips ( ) B & W (x) Color; Audio: (x) Yes ( ) No
- ☒ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☐ 11-12 ☒ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE:
- ☐ Teacher Educator ( ) pre-service ( ) in-service
- ☐ State Personnel ☐ Local Administrators ☒ Guidance Personnel
- ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☐ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☒ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☐ Free

Other–Explain: Available after July 1975

TO ORDER, PLEASE CONTACT: Roger H. Lambert, Center for Studies in Vocational-Technical Education, 321 Education, 1000 Bascom Mall, Madison, Wisconsin 53706

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"Employability Skills" is a program designed to provide students with assistance in developing the non-job skill techniques necessary to obtain work and to advance in an occupational field. The completed program will consist of eleven self-contained modules primarily developed for individual use but supplemented with materials and features which permit utilization with a group or in a classroom setting.

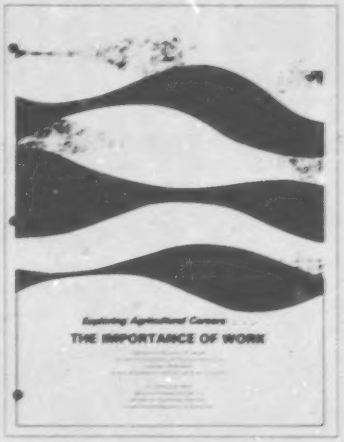
The eleven modules will center around those topics considered by district student service personnel to be crucial to either job acquisition or job success: introduction and orientation; self-inventory and analysis; personal data and resume; job seeking procedures (includes utilization of employment agencies and services); job application forms and job tests; the job interview and follow-up; wages, deductions and fringe benefits; labor unions and professional organizations; job conduct (first day, first few weeks, relations with supervisor, relations with fellow workers, how to be promoted, how to lose your job); career ladder and changing jobs; and money management.

The program will be essentially audio-visual, using audio cassettes keyed to carousel slide units. Corresponding individual student manuals will also be developed. Additionally, a teacher's guide will be provided for those desiring to use this program in the classroom for group presentations.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Roger H. Lambert, Associate Director
	AGENCY:	Center for Studies in Vocational and Technical Education
	ADDRESS:	321 Education 1000 Bascom Mall
		Madison, Wisconsin 53706 PHONE: 263-2704

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Exploring Agricultural Careers . . . The Importance of Work
DATE OF DEVELOPMENT AND/OR REVISION	1975
NAME OF DEVELOPER(S)	Jasper S. Lee

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☒ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 19 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☒ Free

Other–Explain: Limited Copies Available

TO ORDER, PLEASE CONTACT: Agricultural Education Program, Division of Vocational and Technical Education, College of Education, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"The Importance of Work" is designed to develop "a basic knowledge of work so that when a decision is made it will be based on adequate information."

This booklet is written at an appropriate reading level for most students in grades seven and up. It may be used by students exploring agricultural careers or by the teacher as a resource document.

This publication is designed to answer the following questions about work:

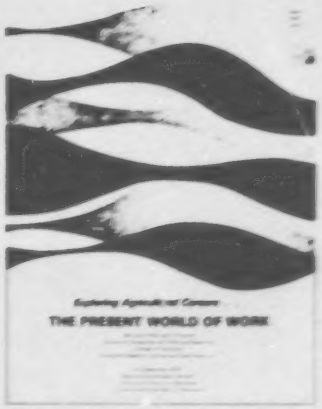
1. What is "work," "world of work?", and "agricultural world of work"?;
2. What is the distinction between careers, occupations, and jobs?;
3. Why do people work?;
4. How is level of living related to work?;
5. How do people view work?;
6. Why should youth study about work?;
7. Why is it necessary to plan a career?; and
8. What is career education?

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Exploring Agricultural Careers: The Present World of Work
DATE OF DEVELOPMENT AND/OR REVISION	1975
NAME OF DEVELOPER(S)	Jasper S. Lee



SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☒ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 35 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

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STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: Available in limited quantity from source

☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☒ Free

Other—Explain: _____

TO ORDER, PLEASE CONTACT: Jasper S. Lee, Agricultural Education Program, VPI & SU, Blacksburg, VA 24061

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This document contains basic information about work, especially as related to agricultural occupations. It is intended for use with students in grades 7 - 10 and has been written at an appropriate reading level for use in these grades. The content is organized around certain fundamental questions which deal with changes in work, the role of labor unions, how people are paid for work, fringe benefits, and common legal aspects of work.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT

NAME:	Jasper S. Lee
AGENCY:	VPI & SU
ADDRESS:	107 Memorial Hall
	Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Finding and Getting a Job
DATE OF DEVELOPMENT AND/OR REVISION	Current
NAME OF DEVELOPER(S)	SVE Educational Filmstrips

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☒ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☒ Slides and Film Strips ( ) B & W (x) Color; Audio: (x) Yes ( ) No
☒ Audio Tapes ( ) Reel (x) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☒ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☐ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Information not provided

PROVISIONS FOR ACQUIRING MATERIALS:

☒ Purchase (Unit cost $ 63.00) ☐ Rent (Unit Cost $_____) ☐ Free

Other–Explain: _____

TO ORDER, PLEASE CONTACT: Robert V. House, Singer/SVE, 1738 Monticello Street, Petersburg, Virginia 23803

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

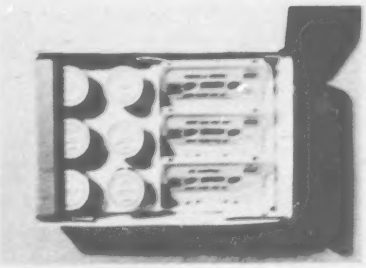
This series of filmstrips titled "Finding and Getting a Job," includes the following six divisions: Choosing your career; Finding a job opening; Applying for a job; The job interview; Your first months on the job; and You and the changing world of work. A teaching guide and reading script accompanies each filmstrip.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Finding Your Job
DATE OF DEVELOPMENT AND/OR REVISION	1972
NAME OF DEVELOPER(S)	Eye Gate House



SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☒ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☒ Occupational Choice ☒ Career Advancement ☒ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☒ Slides and Film Strips ( ) B & W (x) Color; Audio: (x) Yes ( ) No
☒ Audio Tapes ( ) Reel (x) Cassette

INTENDED AUDIENCE: ☒ Regular ☒ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☒ 9-10 ☒ 11-12 ☒ 13-14 ☒ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
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☐ Other _____ (Indicate)

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IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 58.50) ☐ Rent (Unit Cost $_____) ☐ Free

Other–Explain: _____

TO ORDER, PLEASE CONTACT: Eye Gate House, Jamaica, New York 11435

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This series of filmstrips and cassettes called "Finding Your Job" developed by Eye Gate help an individual take a look at his or her individual abilities and interests and put them to work in landing a job.

The package includes three cassettes and six filmstrips. The series is divided into the following parts: What can you do?; Job shopping; The job interview; Finding a career; Working for someone else; and Getting a better job.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC

INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	First Things
DATE OF DEVELOPMENT AND/OR REVISION	1970
NAME OF DEVELOPER(S)	Guidance Associates

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☒ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☒ Slides and Film Strips ( ) B & W (x) Color; Audio: (x) Yes ( ) No
☒ Audio Tapes ( ) Reel ( ) Cassette (x) Records

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE:
☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

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IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Permission for duplication must be in writing from the publisher.

PROVISIONS FOR ACQUIRING MATERIALS:
☒ Purchase (Unit cost $ 86.00) ☐ Rent (Unit Cost $_____) ☐ Free
Other–Explain: Cost breakdown in descriptive abstract

TO ORDER, PLEASE CONTACT: Guidance Associates, 41 Washington Avenue, Pleasantville, New York 10570

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This series from Guidance Associates titled "First Things" will aid students to take a realistic look at themselves, their values and their relationships with others. The following sets of materials are included in the series:

1. Who do you think you are?, $21.50;
2. What do you do about rules?, $21.50;
3. You promised, $21.50; and
4. The trouble with truth, $21.50.

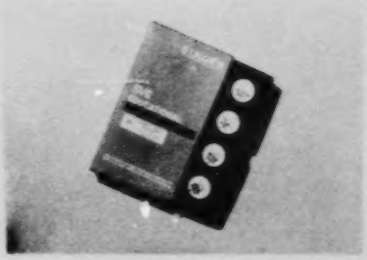
The first set contains three filmstrips and records while the other each contain two filmstrips and records.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Foundations for Occupational Planning
DATE OF DEVELOPMENT AND/OR REVISION	Current
NAME OF DEVELOPER(S)	SVE Educational Filmstrips



SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☒ Why Work ☒ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☒ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☒ Slides and Film Strips ( ) B & W (x) Color; Audio: ( )Yes (x)No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☒ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☒ Pre-K thru 3 ☒ 4-6 ☒ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

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PROVISIONS FOR ACQUIRING MATERIALS: _____

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Other—Explain: _____

TO ORDER, PLEASE CONTACT: Robert V. House, Singer/SVE, 1738 Monticello Street, Petersburg, Virginia 23803

Descriptive Abstract

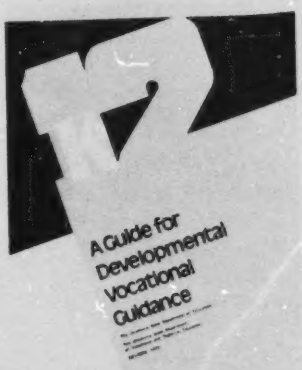
Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This series of filmstrips titled "Foundations for Occupational Planning" includes the following five divisions: What is a job?; What good is school?; What do you like to do?; Who are you?; and What are job families?

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Currry, Project Director
	AGENCY:	Work Ethics Project, VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	A Guide For Developmental Vocational Guidance, K-12
DATE OF DEVELOPMENT AND/OR REVISION	June 1973
NAME OF DEVELOPER(S)	State Dept. of Guidance & Counseling in cooperation with the State Dept. of Vocational & Technical Education

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 173 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☒ Pre-K thru 3 ☒ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult
☒ Teacher ☒ Teacher Educator ☒ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator (x) pre-service (x) in-service
☒ State Personnel ☒ Local Administrators ☒ Guidance Personnel
☐ Other _____ (Indicate)

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IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____
☒ Purchase (Unit cost $ 2.00) ☐ Rent (Unit Cost $_____) ☐ Free
Other—Explain: _____

TO ORDER, PLEASE CONTACT: Curriculum Center - Oklahoma State Department of Vocational and Technical Education, Stillwater, Oklahoma 74-74

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

A Guide for Developmental Vocational Guidance, K-12 is a guide designed to share with teachers, administrators, and counselors some facets of the child's development and some basis for vocational decision making. It is not the purpose of the guide to encourage students to make premature decisions concerning career choice, but to give students the opportunity over a long period of time to develop a reservoir of information, attitudes, and experiences which will serve as a substantial base for decision making. The content of the guide contains creative and innovative techniques in vocational guidance that are adaptable and pertinent to schools regardless of size or location.

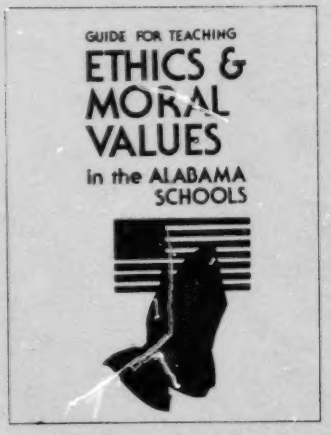
Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT

NAME:	Jeanetta C. Shipp
AGENCY:	State Department of Vocational & Technical Education, Curriculum and Instructional
ADDRESS:	Materials Center 1515 West Sixth Avenue
	Stillwater, Oklahoma PHONE: 377-2000

WORK ETHIC

INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Guide for Teaching Ethics and Moral Values in the Alabama Schools
DATE OF DEVELOPMENT AND/OR REVISION	1974
NAME OF DEVELOPER(S)	Division of Instruction State Department of Education Montgomery, Alabama

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL: ☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 51 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☒ Pre-K thru 3 ☒ 4-6 ☐ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

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IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: Information not provided

☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: _____

TO ORDER, PLEASE CONTACT: Division of Instruction, State Department of Education, Montgomery, Alabama

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This guide for teaching ethics and moral values in Alabama schools is not to be thought of as a complete course to be taught at any one time or at any one level. It should be made an integral part of the students' total school experiences everyday.

Chapter VI deals directly with the dignity and values associated with work. This guide is directed at the development of positive attitudes and values, a part of the learning process that is often neglected in the educational system.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT

NAME:	Charles Curry, Project Director
AGENCY:	Work Ethics Project; VPI & SU
ADDRESS:	102 War Memorial Gym
	Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Happiness is Landing a Job
DATE OF DEVELOPMENT AND/OR REVISION	Current
NAME OF DEVELOPER(S)	Linda Brodine, Dixie Gibbons, Paul J. Forch, Sharon Reeder

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☒ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 45 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☒ 13-14 ☒ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

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IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☒ Free

Other—Explain: Single Copies

TO ORDER, PLEASE CONTACT: Dr. L. Dean McClellan, Director, Center for Vocational and Technical Education, West Campus, Kearney State College, Kearney, NE 68847

Descriptive Abstract

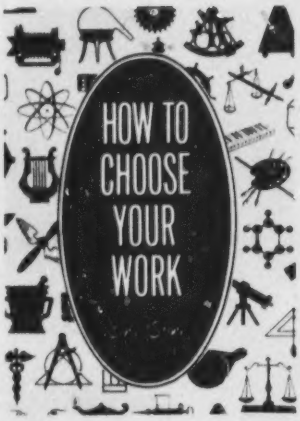
Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"Happiness is Landing a Job" is a learning activity package in which the student learns the mechanics involved in getting a job. Activities included in the packet are: constructing and typing a letter of application and a resume, filling out a job application form, preparing for the job interview, conducting yourself during the interview, and constructing a follow-up letter.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Elsie Cafferty
	AGENCY:	Kearney State College
	ADDRESS:	Kearney, NE 68847
		PHONE: 236-4352

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	How To Choose Your Work
DATE OF DEVELOPMENT AND/OR REVISION	1969
NAME OF DEVELOPER(S)	Elna Stone

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☒ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☒ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 64 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☒ 13-14 ☒ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE:
☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

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IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

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Other—Explain: _____

TO ORDER, PLEASE CONTACT: The Bruce Publishing Company, Milwaukee, Wisconsin

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

How To Choose Your Job asks the student the following three main questions:

1. What do you want to do?;
2. What can you do?; and
3. What kind of work is available to you?

Exercises, stories and discussion of problems are developed to assist the student in answering these questions. Some of the topics discussed are money, security, recognition, skills, experience, education, and personal qualities.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	How To Get A Job
DATE OF DEVELOPMENT AND/OR REVISION	1969
NAME OF DEVELOPER(S)	Elna Stone

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☒ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 74 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☒ 9-10 ☒ 11-12 ☒ 13-14 ☒ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

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IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

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PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 2.40) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: _____

TO ORDER, PLEASE CONTACT: The Bruce Publishing Company, Milwaukee, Wisconsin

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

How To Get A Job follows the process of getting a job in a step-by-step fashion.

This booklet offers many useful hints to the person looking for employment. Real life situations are developed for the student to evaluate. The booklet includes the following:

1. Finding the job opening;
2. The application;
3. The interview;
4. The follow-up;
5. How to pass a test; and
6. Writing a resume.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Unit 3: Human Relations in Agri-Business
DATE OF DEVELOPMENT AND/OR REVISION	Current
NAME OF DEVELOPER(S)	Raymond M. Clark, Urban Oen, James Gibson, Stanley Smith

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL: ☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 41 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☒ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: Information not provided

TO ORDER, PLEASE CONTACT: Michigan Association of Teachers of Vocational Agriculture, Services Committee

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This is one of a series of units for instruction in Agricultural Business. Other units available are.

1. Career opportunities in Agricultural Business;
2. Orientation to Supervised Occupational Experience;
3. Human Relations in Agri-Business;
4. Agricultural Salesmanship; and
5. Organization and Functions of Agricultural Business.

The objective for Human Relations in Agri-Business is "to help you develop your understanding and ability to work productively and congenially with others.

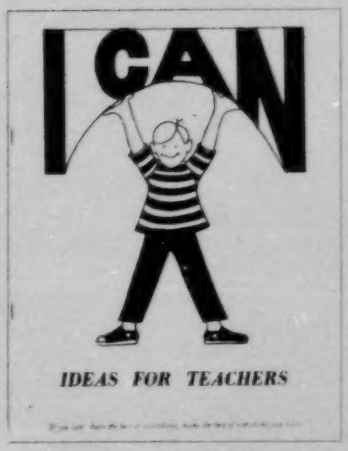
Lessons in this unit are organized into the following headings:

1. Text;
2. Student Activities;
3. Suggestions for Evaluation; and
4. References and Instructional Resources.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	I Can
DATE OF DEVELOPMENT AND/OR REVISION	September 1973
NAME OF DEVELOPER(S)	Carl Butler, Director

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☒ Why Work ☒ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 77 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☒ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-[illegible] ☒ 11-12 ☒ 13-14 ☐ Adult
☒ Teacher ☒ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator ( ) pre-service (x) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☒ Yes ☐ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____
☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☒ Free
Other—Explain: _____

TO ORDER, PLEASE CONTACT: Mr. Carl W. Butler, Division of Program Services, Bureau of Vocational Education, Department of Educational and Cultural Services, State House, Augusta, Maine 04330

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This booklet is a first attempt at creating a "Teachers' trading center," if you will,of practical classroom alternatives for working with students. Its purpose is to help teachers motivate the disadvantaged, but it could be valuable in working with all youngsters.

This publication is a part of the involving design for teaching and learning in vocational education. Presented by the State Department of Educational & Cultural Services, Augusta, Maine, it is proposed as a central framework upon which teachers might build a plan for learning. It is not intended as a step-by-step curriculum guide, but rather as an idea booklet whereby teachers may gain some insight into helping disadvantaged students build confidence while preparing for today's work world.

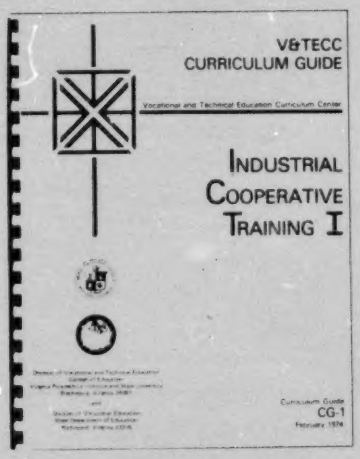
Maine teachers who have had experience with pupils who don't quite fit the pattern were asked for their prescriptions for success. Some of them are included here -- just as the teachers might jot them down for their own planning.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT

NAME:	Dr. Charles W. Ryan
AGENCY:	Bureau of Vocational Education, Dept. of Educational & Cultural Services
ADDRESS:	Augusta, Main 04330
	PHONE: 289-2621

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Industrial Cooperative Training I Curriculum Guide
DATE OF DEVELOPMENT AND/OR REVISION	1974
NAME OF DEVELOPER(S)	Division of Voc. & Tech. Education, VPI & SU and Virginia State Department of Education

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work
☒ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction
☐ Occupational Choice ☒ Career Advancement ☒ Other

TYPE OF MATERIAL: ☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 429 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult
☒ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 5.00) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: Single copies available

TO ORDER, PLEASE CONTACT: Harry Smith, Director of Public Information and Publications, State Department of Education, P. O. Box 6-Q, Richmond, Virginia 23216

Descriptive Abstract

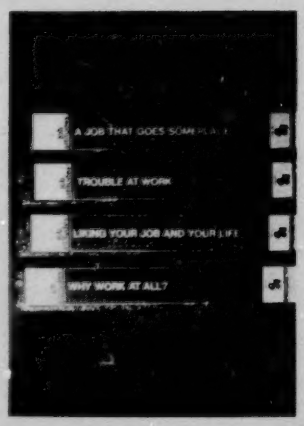
Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

The primary purpose of this guide is to present certain basic sample lesson plans for ICT Coordinators. In the development of this guide during the summers of 1972 and 1973 at Virginia Polytechnic Institute and State University, attention was centered on fostering cooperative training and behavioral objectives were delineated for the generally related study aspect of ICT. The sample lessons contained in this guide are only suggestive and not designed as a course of study to be followed rigidly. The guide does offer suggestions for objectives, content and methods in teaching generally related study. A great variety of professionally prepared transparency master pages are included. Each lesson contains an extensive list of references and films. Included among the 31 lessons in this document are lessons on application procedures, interviewing for a job, and employer--employee relationships.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Donald E. Elson
	AGENCY:	Division of Vocational and Technical Education
	ADDRESS:	Virginia Polytechnic Institute and State University
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Job Attitudes
DATE OF DEVELOPMENT AND/OR REVISION	1970
NAME OF DEVELOPER(S)	Guidance Associates

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☒ Slides and Film Strips ( ) B & W (x) Color; Audio: (x) Yes ( ) No
☒ Audio Tapes ( ) Reel ( ) Cassette (x) Records

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Permission for duplication must be in writing from the publisher.

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 169.50) ☐ Rent (Unit Cost $_____) ☐ Free

Other–Explain: See unit breakdown in descriptive abstract

TO ORDER, PLEASE CONTACT: Guidance Associates, 41 Washington Avenue, Pleasantville, New York 10570

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This series on job attitudes by Guidance Associates consists of the following sets of materials which would need to be purchased individually:

1. A job that goes someplace, $37.50;
2. Trouble at work, $37.50;
3. Liking your job and your life, $37.50;
4. Why work at all, $19.50; and
5. On the job: four trainees, $37.50.

The first two sets contain two filmstrips and records, the third and fifth sets contain four filmstrips and records and the fourth set contains one filmstrip with a record.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Job Finding Kit
DATE OF DEVELOPMENT AND/OR REVISION	Current
NAME OF DEVELOPER(S)	Arnold A. Hirsekorn, Employment Security Department, 4th Edition Revised by Coordinating Council for Occupational Education, State of Washington

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☒ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 34 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☒ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: Information not provided

☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: _____

TO ORDER, PLEASE CONTACT: Coordinating Council for Occupational Education, Washington State

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This booklet provides a step-by-step approach to finding a job. Topics covered are:

1. Letter of application;
2. Resume;
3. Cover letter for resume;
4. Sources of job information;
5. Job interview;
6. Questions frequently asked during the employment interview;
7. The General Educational Development Test (GED); and
8. The certification of educational competence and high school completion.

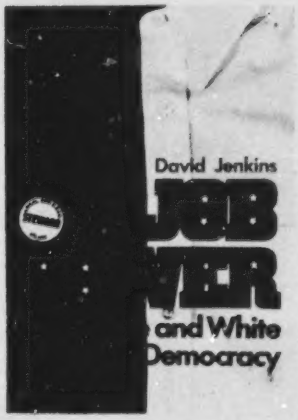
Sample forms of resume and letters are included.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT

NAME:	Brenda Carr, Laboratory Assistant
AGENCY:	Work Ethics Project; VPI & SU
ADDRESS:	102 War Memorial Gym
	Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Job Power Blue and White Collar Democracy
DATE OF DEVELOPMENT AND/OR REVISION	1973
NAME OF DEVELOPER(S)	David Jenkins

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☒ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☒ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☒ Hardcopy 375 Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☒ 13-14 ☒ Adult
☒ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator (x) pre-service (x) in-service
☒ State Personnel ☒ Local Administrators ☒ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☒ Yes ☐ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS All rights reserved

PROVISIONS FOR ACQUIRING MATERIALS:
☒ Purchase (Unit cost $ 8.95) ☐ Rent (Unit Cost $_____) ☐ Free
Other—Explain: _____

TO ORDER, PLEASE CONTACT: Doubleday & Company, Inc., Garden City, New York

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"This book is about industrial democracy. It is more than that: it is a revolution - the abolition of petty office and shop - floor autocrats, management dictators and meaningless work rules, the transformation of work from a kind of punishment into a source of genuine human satisfaction."

The author examines work in other nations: the spirit of the kibbutz in Israel; the Titoist self-management in Yugoslavia; social reform through codetermination in West Germany; the elusive participation in France; the promise of Britain; and the model established by Scandinavia.

"Some remarkable democratization moves at major United States companies such as General Foods and Proctor & Gamble" are viewed and discussed as changes in the work ethic."

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	The Job You Want - How To Get It
DATE OF DEVELOPMENT AND/OR REVISION	1975
NAME OF DEVELOPER(S)	Walter L. Blackledge Ethel L. Blackledge Helen J. Keily

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work
☒ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction
☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL: ☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 92 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☐ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Information not provided

PROVISIONS FOR ACQUIRING MATERIALS: Information not provided

☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☐ Free

Other–Explain: _____

TO ORDER, PLEASE CONTACT: South-Western Publishing Company, Cincinnati, Ohio

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"The Job You Want - How to Get It" is a workbook for student use.

The chapters included in the workbook are:

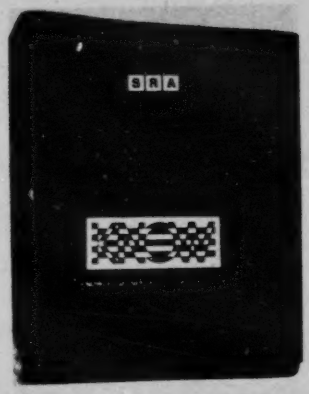
1. You can get a job;
2. What's your goal;
3. Make your summer profitable;
4. You can sell your abilities;
5. Introduce yourself on paper;
6. Your application form expresses you; and
7. You have an interview - what to do now.

The workbook is prepared in a form which is interesting to the student. Situations which are realistic are developed and the student has an opportunity to answer questions and/or solve problems.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Knowledge Needed to Obtain Work(KNOW) Teacher Counselor Guide
DATE OF DEVELOPMENT AND/OR REVISION	1973
NAME OF DEVELOPER(S)	Thomas J. Jacobson

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☒ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL: ☒ Hardcopy 65+ Pages (no.) Includes transparencies
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☒ Adult
☒ Teacher ☒ Teacher Educator ☐ Administrator ☒ Other Counselor

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☐ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☒ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 50.00) ☐ Rent (Unit Cost $_____) ☐ Free

Other–Explain: Available in Spanish - school price

TO ORDER, PLEASE CONTACT: Science Research Associates, Inc., Chicago, Illinois

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This teacher and counselor guide would be excellent for group instruction in the areas of occupational choice and getting and holding a job. Transparencies are provided for visual instruction by a teacher or counselor that would permit a student to zero in on his or her career interests and goals.

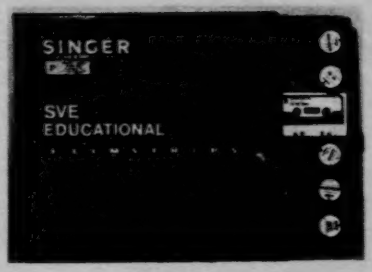
Specific emphasis is placed on job applications, interviewing, and procedures involved in landing a job.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Learning About Me
DATE OF DEVELOPMENT AND/OR REVISION	Current
NAME OF DEVELOPER(S)	SVE Educational Filmstrips



SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☒ Slides and Film Strips ( ) B & W (x) Color; Audio: (x) Yes ( ) No
☒ Audio Tapes ( ) Reel (x) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☒ Pre-K thru 3 ☒ 4-6 ☐ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☐ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Information not provided

PROVISIONS FOR ACQUIRING MATERIALS:
☒ Purchase (Unit cost $ 74.50) ☐ Rent (Unit Cost $_____) ☐ Free
Other—Explain: _____

TO ORDER, PLEASE CONTACT: Robert V. House, Singer/SVE, 1738 Monticello Street, Petersburg, Virginia 23803

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This series of filmstrips titled "Learning About Me," is designed to develop the student's self-concept. It is divided into the following five sections: Different shapes; First step; I'm new here; Borrowed friendship; and I'm the boss.

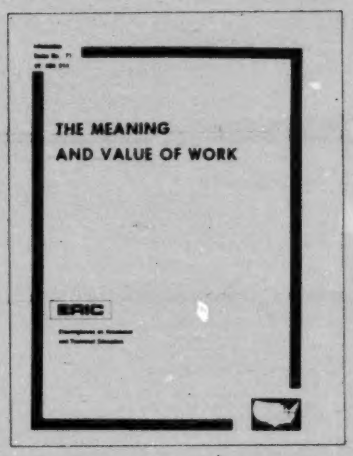
The filmstrips are open-ended and provide teachers with an audio and visual tool for exploring self-concept development with their students.

A teacher's manual is included which lists a series of discussion questions and role playing activities for each filmstrip.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	The Meaning and Value of Work
DATE OF DEVELOPMENT AND/OR REVISION	1973
NAME OF DEVELOPER(S)	H. C. Kazanas, G. E. Baker, F. M. Miller, L. D. Hannah

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☒ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☒ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 84 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☒ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator (x) pre-service (x) in-service
☒ State Personnel ☒ Local Administrators ☒ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____
☒ Purchase (Unit cost $ 5.00) ☐ Rent (Unit Cost $_____) ☐ Free
Other—Explain: _____

TO ORDER, PLEASE CONTACT: Product Utilization, Center for Vocational Education, 1900 Kenny Road, Columbus, Ohio 43210

Descriptive Abstract

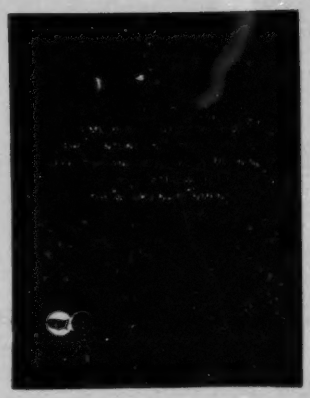
Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

The Meaning and Value of Work reviews the sociological evolution of attitudes toward the meaning and value of work and categorizes and synthesizes those investigations that reflect major influence upon attitudinal changes toward work. This publication could be described as a "state of the art" for the American work ethic.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Dessie D. Page, Product Utilization
	AGENCY:	Center for Vocational Education
	ADDRESS:	1900 Kenny Road
		Columbus, OH 43210 PHONE: 486-3655

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	A Methodology to Assess the Content and Structure of Affective and Descriptive Meanings Associated with the Work Environment
DATE OF DEVELOPMENT AND/OR REVISION	1974
NAME OF DEVELOPER(S)	Duane W. Essex Cheng C. Liu

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☒ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 157 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE:
☒ Teacher Educator ( ) pre-service ( ) in-service
☒ State Personnel ☒ Local Administrators ☐ Guidance Personnel
☒ Other Researcher (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☒ Yes ☐ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: Cost not provided

TO ORDER, PLEASE CONTACT: Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This publication produced at the Center for Vocational Education at The Ohio State University is an exploratory study in the use of word association procedures to assess the affective and descriptive meanings that workers associate with their work environments. This study precedes curriculum guidelines which are now under development which will aid developers of vocational curriculum and occupational training programs to accurately identify occupational requirements.

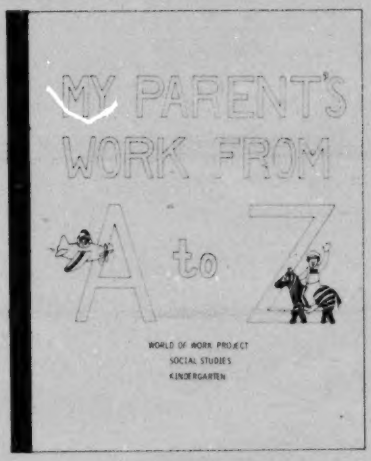
The methods developed for assessing work-relevant effect should be of particular interest to vocational educators striving to better provide students with the knowledge and skills to cope with the interpersonal, affective dimensions of work.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT

NAME:	Charles Curry, Project Director
AGENCY:	Work Ethics Project; VPI & SU
ADDRESS:	102 War Memorial Gym
	Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	My Parent's Work From A to Z
DATE OF DEVELOPMENT AND/OR REVISION	Current Publication
NAME OF DEVELOPER(S)	Dr. Ray D. Warner Occupational Education Program for Children

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☒ Realistic Self-Image ☒ Why Work
☐ Getting and Holding a Job ☐ Ethical Conduct ☒ Job Satisfaction
☒ Occupational Choice. ☐ Career Advancement ☐ Other

TYPE OF MATERIAL: ☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 58 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☒ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Permission may be requested from the Utah State Department of Public Instruction

PROVISIONS FOR ACQUIRING MATERIALS: Information not provided

☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☒ Free

Other—Explain: _____

TO ORDER, PLEASE CONTACT: Utah State Department of Public Instruction, Vocational Education Division, 136 East South Temple, Salt Lake City, Utah

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

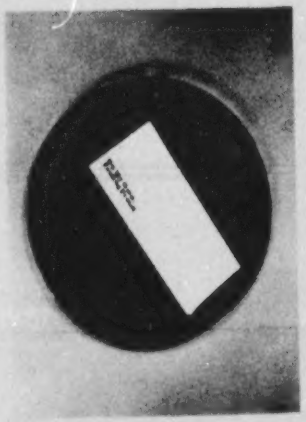
"My Parent's Work From A to Z" stresses the idea that learning to work begins at home. Kindergarten children are also asked the questions "Why does my father and/or mother work?" "What does my father and/or mother do at work?"

Worksheets, plans for a scroll picture viewer, flannel board, art suggestions and stories about occupations are used to tell the story of work.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	On My Own, Feeling Proud
DATE OF DEVELOPMENT AND/OR REVISION	1972
NAME OF DEVELOPER(S)	Miller Production Incorporated 800 West Avenue/Box 5584 Austin, Texas 78763

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☒ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☒ Film 15 Minutes (no.) ( ) B & W (x) Color 16 Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☒ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult
☒ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator (x) pre-service (x) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☒ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 125.00) ☐ Rent (Unit Cost $_____) ☒ Free

Other—Explain: Free on loan basis

TO ORDER, PLEASE CONTACT: Resource Center, Texas Education Agency, 201 East 11th Street, Austin, Texas 78701

Descriptive Abstract

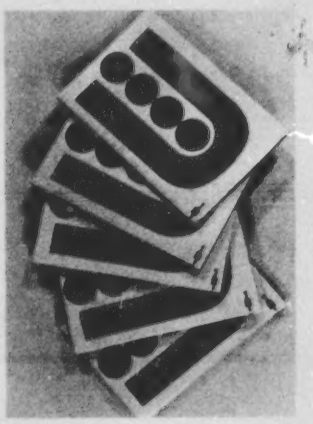
Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"On My Own, Feeling Proud" deals with occupational education for the handicapped. It is designed to give all people, especially young people, a life of meaningful activity. The film covers three steps including self appraisal, education and placement, and assistance in creating a change in attitude for the viewers, helping them realize the handicapped can assume an important place in our society.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Resource Center
	AGENCY:	Texas Education Agency
	ADDRESS:	201 East 11th Street
		Austin, Texas 78701 PHONE: 475-3468

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Opportunity Knocks A Series About You, Your Job and Your Future
DATE OF DEVELOPMENT AND/OR REVISION	1968
NAME OF DEVELOPER(S)	Margaret E. Andrews

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☒ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 150 Pages (no.) per book (approximately)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☒ 9-10 ☒ 11-12 ☒ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS All rights reserved

PROVISIONS FOR ACQUIRING MATERIALS:
☒ Purchase (Unit cost $ 1.96) ☐ Rent (Unit Cost $_____) ☐ Free
Other—Explain: cost per book

TO ORDER, PLEASE CONTACT: Gregg Division, McGraw-Hill Book Company, New York, New York

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

Opportunity Knocks is a series about you, your job, and your future. The series strives to help the student develop the most of himself/herself and the life he/she will be leading.

There are 6 books in the series. Each book deals with one of the following topics:

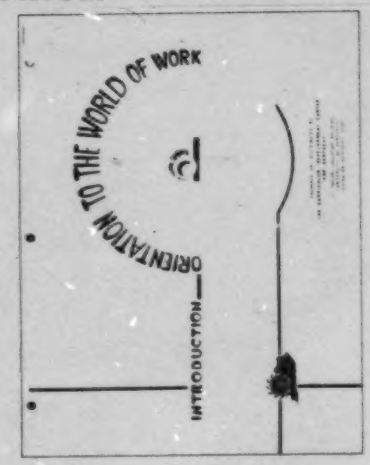
1. The jobs you want;
2. About her;
3. About him;
4. You said it;
5. You pay for it; and
6. It's up to you.

Examples, stories, drawing and pictures help make the series meaningful and interesting to the student.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Orientation to the World of Work
DATE OF DEVELOPMENT AND/OR REVISION	1972-1974
NAME OF DEVELOPER(S)	Curriculum Development Center University of Kentucky Lexington, Kentucky 40506

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☒ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☒ Disadvantaged ☒ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☒ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE:
☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☒ Yes ☐ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 30.00) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: Cost breakdown in descriptive abstract

TO ORDER, PLEASE CONTACT: Resource Center, 151 Education Building, University of Kentucky, Lexington, Kentucky 40506

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

Units of study in the Orientation to the World of Work are:

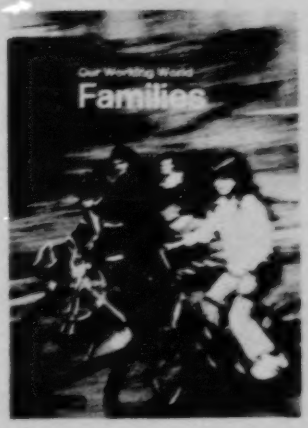
1. Introduction -- Orientation to the world of work, $2.00;
2. The role of work in our society, $2.50;
3. Self-appraisal for employment, $2.50;
4. Personal development, $3.00;
5. Learning about job clusters, $5.00;
6. Getting a job, $3.00;
7. Handling your paycheck, $2.00;
8. Taxes affecting the worker, $2.50;
9. Occupational safety, $3.50;
10. Using the Telephone & Transparency Masters, $2.00; and
11. Teacher's handbook, $2.00.

In this unit, "emphasis is given to concepts of self-analysis, self-improvement, goal setting, selecting a career and succeeding in it, being a better informed consumer, and functioning as an informed citizen. Basic, remedial and vocationally related instruction in math and language skills are also incorporated to provide the disadvantaged/handicapped students with the background needed to succeed in regular vocational programs."

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Our Working World Families
DATE OF DEVELOPMENT AND/OR REVISION	1973
NAME OF DEVELOPER(S)	Lawrence Senesh

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☒ Realistic Self-Image ☒ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☒ Other

TYPE OF MATERIAL:
☒ Hardcopy 160 Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☒ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☒ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Information not provided

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 3.60) ☐ Rent (Unit Cost $_____) ☐ Free

Other–Explain: School price

TO ORDER, PLEASE CONTACT: Science Research Associates, Inc., Chicago, Illinois

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

Our Working World Families is a very colorful and picturesque book directed at the lower elementary grade level. Students reading and looking at pictures will get a very good approach to the "world of work."

Professional, service, technical and labor type jobs are pictured and described. The student is encouraged to examine himself to see where he fits into the working world.

This publication should encourage positive self-concept development for all children as it pictures and describes the economically disadvantaged as well as the middle class and the affluent.

This book is part of a basal textbook series in social studies.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 9 1-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Personal Development for Girls and Answer Book
DATE OF DEVELOPMENT AND/OR REVISION	July 1972
NAME OF DEVELOPER(S)	Instructional Materials Lab, D E Department, Division of Extension, The University of Texas

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 146 Pages (no.) Answer Book 44 Pages
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☒ Disadvantaged ☒ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☒ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 6.00) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: $4.00 Personal Development for Girls; $2.00 Answer Book

TO ORDER, PLEASE CONTACT: Instructional Materials Laboratory, Distributive Education Department, Division of Extension, The University of Texas, Austin, Texas 78712

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

Personal Development for Girls was developed for girls in distributive education with personal problems. "Distributive Education students must continually sell themselves and their services, and this demands development of a pleasing personality, attractive personal appearances, positive attitudes and effective communications." Development of these traits affects the individual's self image.

This booklet helps the individual sell herself with the help of the following units: (1) Developing Personal Health; (2) Developing Personal Appearance; and (3) Personal Skills and Behavior.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC

INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Personal Development for Young Men and Answer Book
DATE OF DEVELOPMENT AND/OR REVISION	1974
NAME OF DEVELOPER(S)	Instructional Materials Lab, D E Department, Division of Extension, The University of Texas

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 119 Pages (no.) Answer Book 46 Pages
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☒ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☒ 13-14 ☒ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 6.00) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: $4.00 Personal Development for Young Men; $2.00 Answer Book

TO ORDER, PLEASE CONTACT: Instructional Materials Laboratory, Distributive Education Department, Division of Extension, The University of Texas, Austin, Texas 78712

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

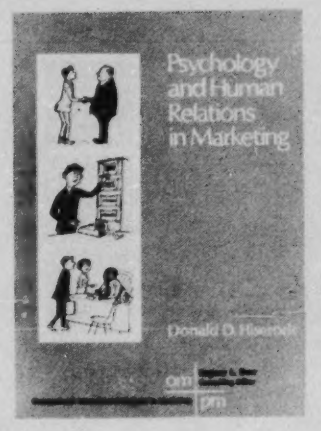
Personal Development for Young Men is a distributive education manual designed to use as an aid in developing the physical appearance of the prospective employee. This publication has one major section designed to develop an individual's personality. This study guide is based on the assumption that how we look, feel and act affects the way we perform on the job.

At the end of each chapter there are study questions and projects for student application of the materials. The teacher of any subject area could implement these materials into their teaching calendar.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Psychology and Human Relations in Marketing
DATE OF DEVELOPMENT AND/OR REVISION	1969
NAME OF DEVELOPER(S)	Donald D. Hiserodt

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 108 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☒ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS All rights reserved

PROVISIONS FOR ACQUIRING MATERIALS:
☒ Purchase (Unit cost $ 2.80) ☐ Rent (Unit Cost $_____) ☐ Free
Other—Explain: _____

TO ORDER, PLEASE CONTACT: Gregg Division, McGraw-Hill Book Company, New York, New York

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"The distributive worker must possess basic skills and have a thorough knowledge of the fundamentals of our free enterprise economic system. He must be able to carry out the various marketing functions, and he must be familiar with the technology or specialty revolving around a product or service. But man's work is not solely with data and equipment. To succeed, he must possess an additional fundamental competency - the social skills."

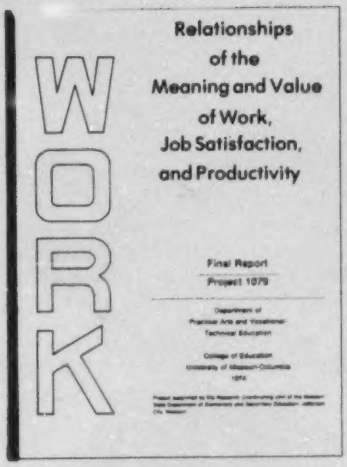
Psychology and Human Relations in Marketing is designed as a workbook which is effective in getting the student involved in developing these social skills needed for marketing. Real life situations and drawing create interest in marketing and human relations.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC

INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Relationships of the Meaning and Value of Work, Job Satisfaction, and Productivity
DATE OF DEVELOPMENT AND/OR REVISION	1974
NAME OF DEVELOPER(S)	H. C. Kazahas T. G. Gregor L. D. Hannah

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☐ Realistic Self-Image ☒ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☒ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 137 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult
☒ Teacher ☒ Teacher Educator ☒ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator (x) pre-service (x) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☒ Yes ☐ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: Information not provided

☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: _____

TO ORDER, PLEASE CONTACT: Research Coordinating Unit, State Department of Education, Jefferson Building, Jefferson City, Missouri 65101

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This publication includes the results of an extensive research project conducted in 1974 to determine the relationship between the meaning and value of work, job satisfaction and productivity.

The long list of conclusions resulting from this project indicates the extreme importance of work values in job satisfaction and productivity. Recommendations include: (1) students work value orientation should be utilized instead of their perceptions of the meaning of work in diagnostic counseling situations; (2) work values should be given special consideration in helping 12th grade students understand themselves; (3) educational and business communities need to more fully understand the dynamic work process and move toward restructuring the work role; and (4) educators responsible for the vocational training of students should consider the affective orientations toward the meaning of work held by the students.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Self Development Unit
DATE OF DEVELOPMENT AND/OR REVISION	September 1973
NAME OF DEVELOPER(S)	Writers: Mrs. C. Blankenship, Mrs. R. Mickle; Coordinator: Mrs. J. Parsley, Revised by Mrs. M. Keeton

SUBJECT OF MATERIAL:
☐ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work
☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction
☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 36 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☒ Disadvantaged ☒ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE
☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE:
☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☒ Guidance Personnel
☒ Other Teacher of Business and Office Education

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 2.00) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: _____

TO ORDER, PLEASE CONTACT: Mrs. Martha Keeton, Curriculum Specialist, Curriculum Development Center, University of Kentucky, Lexington, KY 40506

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This booklet deals with personal development for the disadvantaged. Its goal is to assist the student who has not had the economic home environment with knowledge of personal, social and business trends.

This publication includes:

General References;
Visual References; and
Student Worksheets.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Self Discovery
DATE OF DEVELOPMENT AND/OR REVISION	1970-1974
NAME OF DEVELOPER(S)	Oklahoma State University

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 19 Pages (no.)
☒ Video Tape 15-25 Minutes (no.) (x) B & W ( ) Color ½" Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☒ Disadvantaged ☒ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Information not provided

PROVISIONS FOR ACQUIRING MATERIALS: _____
☐ Purchase (Unit cost $_____) ☐ Rent (Unit Cost $_____) ☐ Free
Other—Explain: _____

TO ORDER, PLEASE CONTACT: Oklahoma State Department of Education, Curriculum Materials Center, Stillwater, Oklahoma 74074

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

Self Discovery is designed to help the student recognize and list his interests, skills, experiences and how he gets along with other people in relation to occupations, mainly agricultural occupations.

Instructional materials provided in the unit include:

A. Information Sheets;
B. Assignment Sheets;
   1. Vocational agriculture interests inventory,
   2. Personality self-rating scale,
   3. Interests, experiences and other characteristics,
   4. Autobiography,
   5. Comparing characteristics,
   6. Associate previously identified characteristics while looking into occupational areas for employment;
C. Evaluation of Assignment #2
D. Test; and
E. Answer Sheet for Tests.

Reference materials are also included.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project, VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Self Understanding Through Occupational Exploration (SUTOE)
DATE OF DEVELOPMENT AND/OR REVISION	1971
NAME OF DEVELOPER(S)	Oregon Board of Education Division of Community Colleges and Vocational Education

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 183 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☐ Purchase (Unit cost $ _____) ☐ Rent (Unit Cost $ _____) ☐ Free

Other—Explain: Information not provided

TO ORDER, PLEASE CONTACT: Superintendent of Public Instruction, Oregon Board of Education, Salem, Oregon 97310

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

The "Self Understanding Through Occupational Exploration" course is designed to develop the students self image and prepare him or her to make career and life decisions. It is thought by the developers of this course that it will eliminate further talk of vocational versus academic or college prep education.

This publication contains a series of units lasting 36 weeks and taking a student from self-appraisal and self-understanding through exploring jobs, the course is designed for the junior high school level.

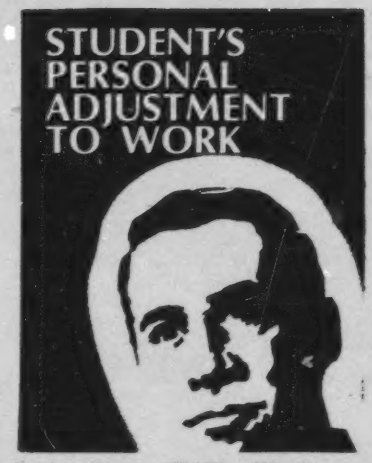
Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT

NAME:	Charles Curry, Project Director
AGENCY:	Work Ethics Project; VPI & SU
ADDRESS:	102 War Memorial Gym
	Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC

INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Student's Personal Adjustment to Work
DATE OF DEVELOPMENT AND/OR REVISION	Revised 1973
NAME OF DEVELOPER(S)	L. A. Grimes

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☒ Realistic Self-Image ☒ Why Work ☒ Getting and Holding a Job ☒ Ethical Conduct ☒ Job Satisfaction ☒ Occupational Choice ☒ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 324 Pages (no.) Includes 53 transparencies
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator (x) pre-service (x) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☒ Yes ☐ No

STIPULATIONS By teacher for student use - not for resale

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 12.95) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: _____

TO ORDER, PLEASE CONTACT: Instructional Materials, Division of Extension, The University of Texas, Austin, Texas 78712

Descriptive Abstract

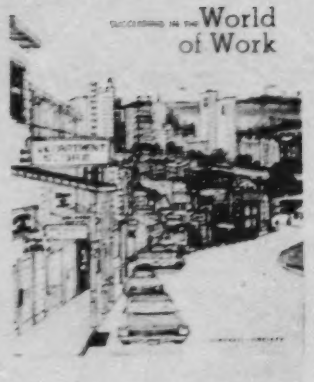
Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

Student's Personal Adjustment to Work is a valuable classroom tool for the cooperative and trade and industrial teacher. Special information for the teacher includes the use of group discussions, audiovisual equipment, lesson plans, and public relations. Lesson topics for the student include safety, job application, job attitudes and relations, personal traits, money and banking, and school and civic responsibilities. Fifty-three transparencies accompany the text and may be used to strengthen class discussions.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Robert S. Patterson
	AGENCY:	Texas Education Agency
	ADDRESS:	201 East 11th Street
		Austin, Texas 78701 PHONE: 475-4591

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Succeeding in the World of Work
DATE OF DEVELOPMENT AND/OR REVISION	1970
NAME OF DEVELOPER(S)	Grady Kimbrell Ben S. Vineyard

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☒ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☒ Hardcopy 484 Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☒ 13-14 ☒ Adult
☒ Teacher ☒ Teacher Educator ☒ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS All rights reserved

PROVISIONS FOR ACQUIRING MATERIALS:
☒ Purchase (Unit cost $ 9.32) ☐ Rent (Unit Cost $_____) ☐ Free
Other—Explain: _____

TO ORDER, PLEASE CONTACT: McKnight & McKnight Publishing Company, Bloomington, Illinois

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"In America, the work we do to earn our living determines our way of life. It is the chief factor in our identity as a person. It affects our choice of friends and the way we spend our leisure time. It also provides our cultural boundaries. Work is the central activity around which we plan our lives. Successful work activity is necessary to a mentally healthy person."

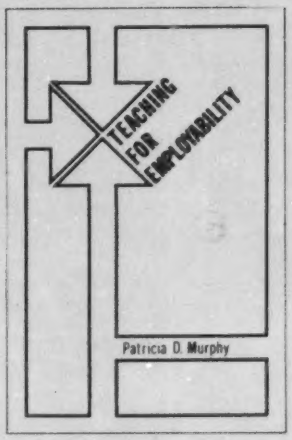
Succeeding in the World of Work helps the student develop good attitudes toward work through the following units:

1. You and work;
2. Meeting your adult responsibilities;
3. Meeting future responsibilities.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Teaching for Employability
DATE OF DEVELOPMENT AND/OR REVISION	1972
NAME OF DEVELOPER(S)	Dr. Patricia Murphy

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☐ Realistic Self-Image ☒ Why Work ☒ Getting and Holding a Job ☒ Ethical Conduct ☒ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☒ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 22 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☐ 13-14 ☐ Adult
☒ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator (x) pre-service (x) in-service
☐ State Personnel ☒ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Permission may be requested from North Dakota RCU or State Board for Vocational Education

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 1.00) ☐ Rent (Unit Cost $_____) ☐ Free

Other–Explain: _____

TO ORDER, PLEASE CONTACT: National Education Association, Home Economics Division, 1201 Sixteenth Street, N. W., Washington, D. C. 20036; Stock number 261-08414

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

The booklet, Teaching for Employability, serves to enable the teacher to make the student aware of personal qualifications and attitudes that will enhance his employability. The booklet is an outgrowth of a research project in which vocational teachers, teacher educators, employers, and workers identified common concerns for employability of entry level employees.

Teaching for Employability contains suggestions for teachers of ways to teach job attitudes and skills. Also included are suggestions for attitude assessments.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Patricia D. Murphy
	AGENCY:	North Dakota State University
	ADDRESS:	Fargo, ND 58102
		PHONE: 237-7174

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Values for Teenagers in the 1970's
DATE OF DEVELOPMENT AND/OR REVISION	1973
NAME OF DEVELOPER(S)	Guidance Associates

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☒ Slides and Film Strips ( ) B & W (x) Color; Audio: (x) Yes ( ) No
☒ Audio ( ) Reel ( ) Cassette (x) Record

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☒ 9-10 ☒ 11-12 ☒ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Permission for duplication must be in writing from the publisher.

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 37.50) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: _____

TO ORDER, PLEASE CONTACT: Guidance Associates, 41 Washington Avenue, Pleasantville, New York 10570

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This package from Guidance Associates contains two filmstrips with scripts in a manual and record. The real life situations which are used in this approach to developing positive values within teenagers are most appropriate to work ethic instruction.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project, VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Vocational Counseling
DATE OF DEVELOPMENT AND/OR REVISION	Current
NAME OF DEVELOPER(S)	International Film Bureau

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work
☒ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction
☒ Occupational Choice ☒ Career Advancement ☒ Other

TYPE OF MATERIAL: ☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☒ Slides and Film Strips ( ) B & W (x) Color; Audio: (x)Yes ( )No
☒ Audio Tapes ( ) Reel ( ) Cassette ( ) Records

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☒ 13-14 ☒ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator (x) pre-service (x) in-service
☐ State Personnel ☐ Local Administrators ☒ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Information not provided

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 60.00) ☐ Rent (Unit Cost $_____) ☐ Free

Other–Explain: _____

TO ORDER, PLEASE CONTACT: International Film Bureau, Inc., 332 South Michigan Avenue, Chicago, Illinois

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

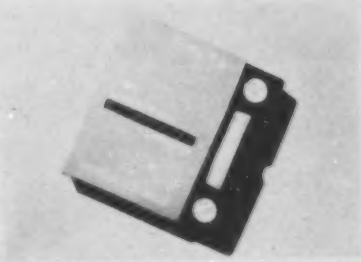
This series of filmstrips and records developed by the International Film Bureau, Inc. titled "Vocational Counseling" has four sections: The right road; Crystal ball; Second chances for security; and Closing the educational gap. This material should be useful to guidance counselors in group as well as individual vocational counseling.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Porject; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Vocational Decisions
DATE OF DEVELOPMENT AND/OR REVISION	Current
NAME OF DEVELOPER(S)	SVE Educational Filmstrips



SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☒ Slides and Film Strips ( ) B & W (x) Color; Audio: (x) Yes ( ) No
☒ Audio Tapes ( ) Reel (x) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☒ 4-6 ☒ 7-8 ☒ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator (x) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Information not provided

PROVISIONS FOR ACQUIRING MATERIALS:

☒ Purchase (Unit cost $ 36.10) ☐ Rent (Unit Cost $_____) ☐ Free

Other–Explain: _____

TO ORDER, PLEASE CONTACT: Robert V. House, Singer/SVE, 1738 Monticello Street, Petersburg, Virginia 23803

Descriptive Abstract

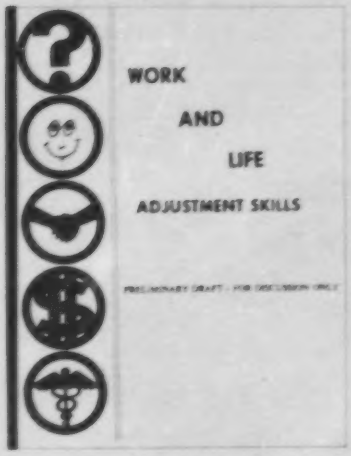
Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This series of filmstrips titled "Vocational Decisions": includes three filmstrips and two cassette tapes. The titles of the filmstrips are as follows: An introduction to vocation; The world of work; and Counseling in vocational decisions.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project, VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Work and Life Adjustment Skills
DATE OF DEVELOPMENT AND/OR REVISION	1973 - Preliminary Draft For Discussion Only
NAME OF DEVELOPER(S)	Howard L. Newby Keith Herring

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☐ Realistic Self-Image ☒ Why Work ☒ Getting and Holding a Job ☒ Ethical Conduct ☒ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 89 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☒ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☒ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 2.00) ☐ Rent (Unit Cost $ _____) ☒ Free - one copy only

Other—Explain: _____

TO ORDER, PLEASE CONTACT: Research and Curriculum Unit, Drawer DX, Mississippi State, Mississippi 39762

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

The publication includes an instructional outline and unit lessons developed for use in both regular vocational programs and industry pre-employment training programs. It is designed to provide training activities related to job preparation and employment. Emphasis is placed on developing an awareness of positive personal traits and their relation to job satisfaction and success.

Modifications are to be made in the material by instructors according to age level of students and type of program. Activities have been developed to make the material more meaningful and applicable to individuals in various types of programs. The publication should be of value to all pre-employment programs.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	James F. Shill
	AGENCY:	Research and Curriculum Unit
	ADDRESS:	Drawer DX
		Mississippi State, MS 39762 PHONE: 325-2510

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	The Work Ethic: A Victim of Progress
DATE OF DEVELOPMENT AND/OR REVISION	May 1974
NAME OF DEVELOPER(S)	Current Affairs Films

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☒ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☒ Slides and Film Strips ( ) B & W (x) Color; Audio: (x) Yes ( ) No
☒ Audio Tapes ( ) Reel (x) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☒ 13-14 ☒ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS Information not provided

PROVISIONS FOR ACQUIRING MATERIALS:
☒ Purchase (Unit cost $ 22.00) ☐ Rent (Unit Cost $_____) ☐ Free
Other–Explain: _____

TO ORDER, PLEASE CONTACT: Current Affairs, 24 Danbury Road, Wilton, Connecticut 06897

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"The Work Ethic: A Victim of Progress" is one of a series of color filmstrips dealing with contemporary topics, produced by Current Affairs Films. It is primarily for use in junior and senior high schools, but it can also be used effectively with civic groups and other adult audiences.

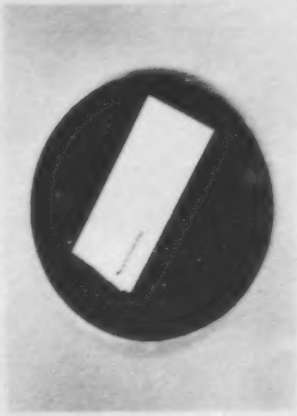
There have been definite signs recently that the attitude that many Americans hold toward work is undergoing a dramatic change. This filmstrip deals with the causes for the erosion of the American work ethic.

A discussion guide is included in this filmstrip-cassette package.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project, VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Work Is Child's Play
DATE OF DEVELOPMENT AND/OR REVISION	1973
NAME OF DEVELOPER(S)	Miller Production Incorporated 800 West Avenue/Box 5584 Austin, Texas 78763

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☒ Film 27 Minutes (no.) ( ) B & W (x) Color 16 Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☒ Pre-K thru 3 ☒ 4-6 ☒ 7-8 ☒ 9-10 ☒ 11-12 ☒ 13-14 ☐ Adult
☒ Teacher ☒ Teacher Educator ☒ Administrator ☒ Other Parents

FOR PROFESSIONAL USE: ☒ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☒ Other Business people

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☒ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____
☒ Purchase (Unit cost $ 300.00) ☐ Rent (Unit Cost $_____) ☒ Free (on loan basis in Texas)
Other–Explain: Film may be rented from Miller Productions also.

TO ORDER, PLEASE CONTACT: Resource Center, Texas Education Agency, 201 East 11th Street, Austin, TX 78701

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"Work Is Child's Play" is a twenty-seven minute color film which sensitively portrays young people growing and learning--discovering themselves in relation to the world around them. The three part process of awareness, exploration, and experience develops to the accompaniment of original music by Bobby Bridger of RCA Records. Produced for business people, educators, parents and students, the film increases understanding of the need for and the benefits of creative and meaningful Career Education as a part of the total educational system.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Resource Center
	AGENCY:	Texas Education Agency
	ADDRESS:	201 East 11th Street
		Austin, TX 78701 PHONE: 475-3468

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	The Worker in Modern Society
DATE OF DEVELOPMENT AND/OR REVISION	January 1974
NAME OF DEVELOPER(S)	Mary Bredemeier J. Henry Zanzalari

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☐ Realistic Self-Image ☒ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 345 Page (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color __ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color __ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☒ 13-14 ☐ Adult ☒ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☐ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 5.00) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: _____

TO ORDER, PLEASE CONTACT: Curriculum Laboratory, Rutgers - The State University, Building 4103 - Kilmer Campus, New Brunswick, New Jersey

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"The Worker in Modern Society" is a history of work in the United States. The history takes the reader from the condition of the worker before the Industrial Revolution to the worker of the 1970's protected by numerous benefits. Labor union, the black movement, women's movement, ecological and anti-war movement are discussed. This history of our working society provides a background for study of our established work ethic.

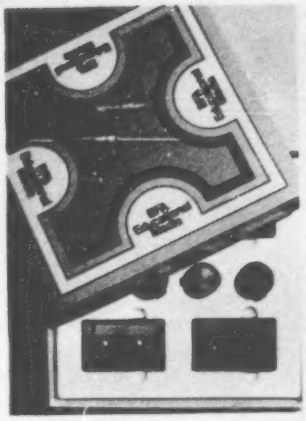
Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT

NAME:	Brenda Carr, Laboratory Assistant
AGENCY:	Work Ethics Project; VPI & SU
ADDRESS:	102 War Memorial Gym
	Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC

INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	Working
DATE OF DEVELOPMENT AND/OR REVISION	Current
NAME OF DEVELOPER(S)	Michael Creedman Bee Morris, Consultant

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☒ Why Work ☐ Getting and Holding a Job ☐ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☐ Paper Bound _____ Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☒ Slides and Film Strips ( ) B & W ( ) Color; Audio: (x) Yes ( ) No
☒ Audio Tapes ( ) Reel ( ) Cassette (x) Records

INTENDED AUDIENCE: ☐ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☒ Pre-K thru 3 ☒ 4-6 ☒ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☒ Yes ☐ No

STIPULATIONS Students worksheets only may be produced.

PROVISIONS FOR ACQUIRING MATERIALS:
☒ Purchase (Unit cost $ 64.50) ☐ Rent (Unit Cost $_____) ☐ Free
Other—Explain: With cassette, $56.50 with records

TO ORDER, PLEASE CONTACT: BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404

Descriptive Abstract

Please write a brief description of the content of the material indicated on the front side of this form. Limit your description to the space provided.

A series of four filmstrips and four cassettes titled "Working" deals with the following four concepts: Why work; What you're worth; On-the-job; and Preparing for the future.

The objectives of this series include: (1) to recognize that there are several different reasons why people work; (2) to recognize that different occupations demand different skills; responsibilities, and therefore demand different salaries; (3) to examine a number of different occupations and the necessary training and experience they demand; and (4) to describe ways to predict and prepare for jobs in the future.

The package includes a teaching guide and student worksheets that may be reproduced.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

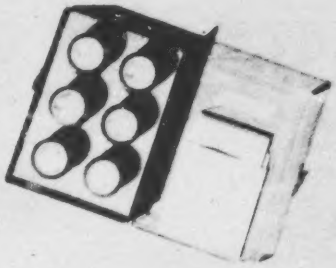
WORK ETHIC

INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS: Work[illegible]

DATE OF DEVELOPMENT AND/OR REVISION: 1970

NAME OF DEVELOPER(S): Lloyd Stjernd[illegible]



SUBJECT OF MATERIAL:
- ☒ Pride in Good Workmanship
- ☐ Realistic Self-Image
- ☒ Why Work
- ☐ Getting and Holding a Job
- ☐ Ethical Conduct
- ☐ Job Satisfaction
- ☐ Occupational Choice
- ☐ Career Advancement
- ☒ Other

TYPE OF MATERIAL:
- ☐ Hardcopy _____ Pages (no.)
- ☐ Paper Bound _____ Pages (no.)
- ☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
- ☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
- ☒ Slides and Film Strips ( ) B & W (x) Color; Audio: ( )Yes ( )No
- ☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☒ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☒ Yes ☐ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS All rights reserved

PROVISIONS FOR ACQUIRING MATERIALS:

☒ Purchase (Unit cost $ 49.50) ☐ Rent (Unit Cost $_____) ☐ Free

Other–Explain:

TO ORDER, PLEASE CONTACT: E. D. Randler, Encyclopedia Britannica Educational Corporation, 165 S. Main Street, Bowling Green, VA 22427

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

This filmstrip series relates the interdependence of individuals working together for society as a whole. Case studies in the mining and coffee industries, for example, relate their products, services and technology to the needs of individuals dependent upon them. The interdependence of the institutions of economics, education, political organization and social control are related realistically on a level that can be understood by lower elementary level students.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Charles Curry, Project Director
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	World of Work
DATE OF DEVELOPMENT AND/OR REVISION	June 1971
NAME OF DEVELOPER(S)	R. T. Benson, B. V. Burkett A. K. Jensen, Betty P. Watkins

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☒ Realistic Self-Image ☒ Why Work ☒ Getting and Holding a Job ☒ Ethical Conduct ☒ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
☐ Hardcopy _____ Pages (no.)
☒ Paper Bound 216 Pages (no.)
☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
☐ Film _____ Minutes (no.) ( ) B & W ( ) Color ___ Size (mm)
☐ Slides and Film Strips ( ) B & W ( ) Color; Audio: ( )Yes ( )No
☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☒ 9-10 ☐ 11-12 ☐ 13-14 ☐ Adult
☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service
☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel
☒ Other Prevocational Education Teachers

IS SPECIALIZED TRAINING REQUIRED FOR OPTIMUM USE OF THESE MATERIALS? ☐ Yes ☒ No

IS MATERIAL COPYRIGHTED? ☐ Yes ☒ No

IF "YES" WILL PERMISSION BE GRANTED FOR DUPLICATION? ☐ Yes ☐ No

STIPULATIONS _____

PROVISIONS FOR ACQUIRING MATERIALS: _____

☒ Purchase (Unit cost $ 5.00) ☐ Rent (Unit Cost $_____) ☐ Free

Other—Explain: _____

TO ORDER, PLEASE CONTACT: Vocational Education Media Center, 109 Freeman Hall, Clemson University, Clemson, South Carolina 29631

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

The World of Work is designed to provide students with an understanding of the importance of work and the personal satisfaction and financial benefits which can be derived from work. The unit provides students with a bird's eye view of broad categories of occupations performed in the world of work, the interdependence of the occupational fields upon each other, and the contributions of each to our economic system. The unit is designed to develop the desirable attitudes and work habits which will enable the students to secure employment and be successful in it.

The World of Work consists of 20 activities. The activity includes objectives, tools and equipment lists, materials required, and procedures. Transparency masters and student work sheets are included.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Betty P. Watkins
	AGENCY:	Vocational Education Media Center
	ADDRESS:	109 Freeman Hall, Clemson University
		Clemson, SC 29631 PHONE: 656-3115

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Your Attitude is Changing
DATE OF DEVELOPMENT AND/OR REVISION	1966
NAME OF DEVELOPER(S)	E. N. Chapman

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☒ Job Satisfaction ☒ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
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FOR PROFESSIONAL USE: ☐ Teacher Educator ( ) pre-service ( ) in-service ☐ State Personnel ☐ Local Administrators ☐ Guidance Personnel ☐ Other _____ (Indicate)

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TO ORDER, PLEASE CONTACT: Science Research Associates, 259 East Erie Street, Chicago, Illinois 60611

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"Your Attitude is Changing" helps the student adjust to the change made from going to school to going to work.

The author wants the student to develop positive attitudes toward work, his boss and fellow employees.

This book is divided into three parts. The first part deals with one's personality and how to build a more positive attitude. The second part explores the world of work and provides the student with the opportunity to discover many excellent jobs for which he might like to prepare. The third part demonstrates to the student how to keep his first job and move to a better one.

The author uses examples and stories which help to clarify his point and to make the material interesting.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC
INSTRUCTIONAL MATERIALS SEARCH

TITLE OF MATERIALS	Your Attitude is Showing A Primer on Human Relations
DATE OF DEVELOPMENT AND/OR REVISION	Second Edition - 1972
NAME OF DEVELOPER(S)	Elwood N. Chapman, Chaffey College, Alta Loma, California

SUBJECT OF MATERIAL: ☒ Pride in Good Workmanship ☒ Realistic Self-Image ☐ Why Work ☐ Getting and Holding a Job ☒ Ethical Conduct ☒ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
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☐ Video Tape _____ Minutes (no.) ( ) B & W ( ) Color ___ Size
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☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☒ 13-14 ☒ Adult
☒ Teacher ☒ Teacher Educator ☒ Administrator ☐ Other

FOR PROFESSIONAL USE: ☒ Teacher Educator (x) pre-service (x) in-service
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Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"Your Attitude is Showing is a positive book. It has helped individuals at all ages and backgrounds play their human relations roles with greater understanding and sensitivity. It has been of special help, however, to the young person faced with the problem of bridging the gap between school life and the world of work because it has prepared him to cope with the many human problems that were waiting for him."

The author uses case problems of realistic situations to develop positive attitudes.

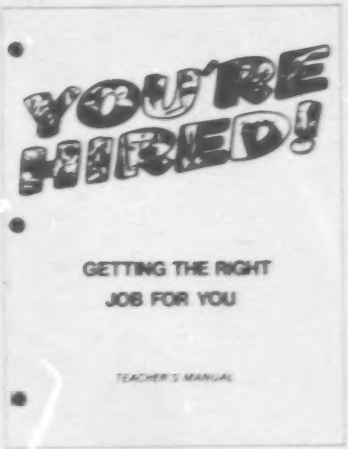
This book is aimed at the high school student and/or college student about to enter the world of work or on his first job.

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

WORK ETHIC

INSTRUCTIONAL MATERIALS SEARCH



TITLE OF MATERIALS	You're Hired! Getting the Right Job For You - Student Activity Book, Teacher's Manual
DATE OF DEVELOPMENT AND/OR REVISION	1972
NAME OF DEVELOPER(S)	Learning Resources Center Virginia Commonwealth University Richmond, Virginia

SUBJECT OF MATERIAL: ☐ Pride in Good Workmanship ☒ Realistic Self-Image ☒ Why Work ☒ Getting and Holding a Job ☒ Ethical Conduct ☐ Job Satisfaction ☐ Occupational Choice ☐ Career Advancement ☐ Other

TYPE OF MATERIAL:
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☐ Audio Tapes ( ) Reel ( ) Cassette

INTENDED AUDIENCE: ☒ Regular ☐ Disadvantaged ☐ Handicapped ☐ Other _____ (Indicate)

TARGET LEVEL OF AUDIENCE: ☐ Pre-K thru 3 ☐ 4-6 ☐ 7-8 ☐ 9-10 ☒ 11-12 ☒ 13-14 ☐ Adult ☐ Teacher ☐ Teacher Educator ☐ Administrator ☐ Other

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TO ORDER, PLEASE CONTACT: Learning Resource Center, Virginia Commonwealth University, Richmond, Virginia

Descriptive Abstract

Directions: Please write a brief description of the content of the material indicated on the front side of this sheet. Please limit your description to the space provided.

"You're Hired! Getting the Right Job for You" includes a student activity book and teacher's manual plus two different types of instructional aids, 10 flip charts on interviews and 15 posters on career clusters. This unit is concerned with the process of finding the right job, submitting applications, facing the interviewer and following up after the interview. The students is involved in decisions about himself, his attitudes and personality in relation to finding the correct job. Student activities in the booklet make job hunting more interesting. The teacher's manual includes a bibliography, audiovisual materials, transparencies, kits and resource information (state and federal).

Abstract Prepared in 1975

PERSON SUBMITTING ABSTRACT		
	NAME:	Brenda Carr, Laboratory Assistant
	AGENCY:	Work Ethics Project; VPI & SU
	ADDRESS:	102 War Memorial Gym
		Blacksburg, VA 24061 PHONE: 951-6836

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ACCESSION NUMBER: VT102373

PUBLICATION DATE: JUN75

TITLE: NEW YORK STATE RESEARCH COORDINATING UNIT SEMI-ANNUAL TECHNICAL PROGRESS REPORT.

DESCRIPTOR: *TECHNICAL REPORTS; *RESEARCH COORDINATING UNITS; *ANNUAL REPORTS

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 6P.

ABSTRACT: THIS REPORT ENUMERATES THE PROGRESS AND ACTIVITIES OF THE NEW YORK STATE RESEARCH COORDINATING UNIT FOR THE PERIOD BEGINNING JANUARY 1, 1975 AND ENDING JUNE 30, 1975. IT INCLUDES A LIST OF CONSULTATIVE SERVICES, CONFERENCE ATTENDANCE, INTERNAL PROJECTS, AVAILABLE FINAL REPORTS, AND PLANNED ACTIVITIES. (AUTHOR/NJ)

INSTITUTION NAME: NEW YORK STATE EDUCATION DEPT., ALBANY. NEW YORK RESEARCH COORDINATING UNIT.

SPONSORING AGENCY NAME: NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF OCCUPATIONAL EDUCATION RESEARCH.

VT 102 373

Research
Coordinating
Unit

SEMI-ANNUAL TECHNICAL PROGRESS REPORT

New York State Research Coordinating Unit

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Bureau of Occupational Education Research
Albany, New York 12224

VT 102 373

INTRODUCTION

The following report encompasses the progress and activities of the New York State Research Coordinating Unit for the period beginning January 1, 1975 and ending June 30, 1975.

I. CONSULTATIVE SERVICES

A. During the past six months, staff members provided consultative services to the following institutions and organizations:

1. New York City Board of Education
2. Northeast Region Occupational Education representatives
3. Onsite visits to Career Education projects in the following places: Binghamton, Elmira, Owego, Niagara-Orleans, Indian River, Canton, Rensselaer, Yorktown Heights, Charlotte Valley, Oneonta, New York City, Yonkers, Rockland County. (All for evaluation purposes.)
4. Local education agencies conducting Comprehensive Employment and Training Act (CETA) projects under Title I special grants set aside for vocational education.
5. EPDA Leadership Development program.
6. Elmira consumer homemaking workshop.

B. Staff members provided consultative services to the following New York State agencies:

1. Department of Corrections
2. Department of Commerce
3. Education Department, Division of Adult and Continuing Education
4. Education Department, Bureau of Inservice Education
5. Education Department, Bureau of Health Occupations Education
6. Education Department, Bureau of Trade and Technical Education
7. Department of Mental Hygiene

II. CONFERENCE ATTENDANCE

A. Staff members attended the following conferences and seminars and/or made presentations to the following:

1. Menands Career Conference
2. New York City conference on "Bread and Butterflies" films
3. Denver RCU conference
4. New York City Occupational Education Community College Co-op Teachers' Conference
5. NYS Civil Service Department Public Administrators' Intern Program
6. Business Industry/Education Coordinators
7. City University of New York advisory meetings
8. Columbia Memorial School of Nursing
9. NYS Association of X-Ray Technologists
10. American Statistical Association
11. American Society for Public Administrators
12. U.S. Census Planning meeting for Capitol District SMSA
13. IBM, Franklin Lakes, New Jersey, Conference on Word Processing
14. Columbia Teachers' College Conference on Word Processing

III. DEVELOPMENT OF INTERNAL PROJECTS

A. A staff member was involved in the revision of the Regents' position paper on values.

B. Planning meetings were held with the Ad Hoc Metric Advisory Committee and with the Metric Task Force.

C. A staff member is involved in exploring directions for research and evaluation of manpower type programs.

D. Activities are underway for the development of a liaison with the Manpower Planning Secretariat.

E. A CETA evaluation proposal was developed and a CETA Trainee Profile Interim Report was completed.

F. A staff member presented "Bread and Butterflies" (TV modules in career education) to 4th, 5th, and 6th grade teachers in Rochester, New York.

G. A meeting was held with administrators and staff from Syracuse to discuss MDTA closeout.

H. An Industrial Arts Mobility Study was discussed with Bureau of Industrial Arts staff.

I. An advisory meeting was held with City University of New York research and development staff.

J. The new concept "word processing" was discussed with staff of the Albany IBM office.

K. A staff meeting was held with Bureau of Inservice Education staff to discuss evaluation of inservice workshops.

L. Report #1 of the Decision Oriented Evaluation System (DOES) was drafted.

M. Seven clusters of learner benefits for the Bureau of Inservice Education Coordinator Programs were developed.

N. A planning session was held with community college health occupations education staff for the development of 1975-76 workshops.

O. The Mobility Study of Teacher Education Graduates: Patterns of Employment, Education, and Selected Characteristics was completed.

P. Data collection for the IA Publishing Center was completed.

Q. Attributes and objectives for EPDA, Part F, Section 552 Leadership Development Training Program Evaluation were completed.

R. A staff member assisted in the development and submission of an ESAA Foundation of the Arts proposal.

S. A staff member planned the evaluation of Industry/Education programs in New York State.

T. A staff member assisted in the development of a plan to develop an instructional delivery system in agri-business skills for migrant workers. (Planned activities were dropped.)

IV. AVAILABLE COMPLETED FINAL OR SUMMARY REPORTS

A. Form 1 - Participants' Evaluation of Inservice Teacher Workshops.

B. Form 2 - Observers' Evaluation of Participants of Inservice Teacher Workshops.

C. NYSECA Conference Evaluation (1974).

D. Career Project Summaries and Evaluation of Adult Homemaking Consumer Projects (not available for general distribution).

E. CETA Trainee Profile Interim Report (Education Department use only).

V. PLANNED ACTIVITIES

A. Continuing activities with the Metric Council.

B. Work will continue on the Regents' position paper on values.

C. A joint occupational counseling related project is being planned with the Bureau of Guidance.

D. The CETA annual report is to be completed. Field visits to CETA projects will be made as required. The completion and acceptance of the CETA evaluation proposal is expected.

E. A staff member will be chairperson for the Statewide Career Projects Validation.

F. The Adult Consumer Homemaking Conference Evaluation will be developed.

G. A staff member will prepare a publication on Health Occupation Teacher Competency.

H. The R & D Centers at Cornell and City University of New York will be monitored.

I. A report will be completed on occupational education in the five large cities of New York State.

J. Assistance will be continued in Project Reachout.

K. The data will be analyzed for the "Effect on Reading Achievement of Elementary School Students Exposed to Industrial Arts Publishing Centers in New York City."

L. A cost-benefit analysis system for New Jersey postsecondary cooperative education institutions will be completed.

VI. MISCELLANEOUS ACTIVITIES

A. The Semi-Annual Technical Progress Report for July 1, 1974 - December 31, 1974 was completed.

B. Volume VIII, Nos. 1, 2, 3, 4, 5, and 6 of the RCU Newsletter were published.

ACCESSION NUMBER: VT102375

PUBLICATION DATE: 75

TITLE: RECENT MANPOWER LEGISLATION AND PROGRAMS: IMPLICATIONS FOR RESEARCH AND DEVELOPMENT. OCCASIONAL PAPER SERIES NO. 7.

PERSONAL AUTHOR: ROSEN, HOWARD

DESCRIPTOR: *LEGISLATION; *MANPOWER DEVELOPMENT; *RESEARCH NEEDS; LECTURE

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 16P.

ABSTRACT: DR. HOWARD ROSEN, DIRECTOR OF THE OFFICE OF MANPOWER RESEARCH AND DEVELOPMENT, MANPOWER ADMINISTRATION, PRESENTS IN THIS LECTURE A DISCUSSION OF THE IMPLICATIONS FOR RESEARCH AND DEVELOPMENT WHICH HAVE EVOLVED FROM RECENT MANPOWER LEGISLATION AND PROGRAMS. HE REVIEWS THE ECONOMIC SITUATIONS WHICH LED TO THE PASSAGE OF THE MANPOWER DEVELOPMENT AND TRAINING ACT OF 1962 AND THE COMPREHENSIVE EMPLOYMENT AND TRAINING ACT OF 1973. IT IS HIS SUGGESTION THAT IN THIS CURRENT PERIOD OF ECONOMIC DOWNTURN THE EMPHASIS SHOULD BE ON DEVELOPING OUR HUMAN RESOURCES AND IMPROVING THE SKILL LEVEL OF WORKERS FOR THE TIME WHEN EMPLOYMENT WILL RISE. (NJ)

AVAILABILITY: CENTER FOR VOCATIONAL EDUCATION, OHIO STATE UNIVERSITY, 1960 KENNY ROAD, COLUMBUS, OHIO 43210. (ORDER #OC7, $1.00 EA.)

INSTITUTION NAME: OHIO STATE UNIV., COLUMBUS. CENTER FOR VOCATIONAL EDUCATION.

VT 102 375

Recent Manpower Legislation And Programs: Implications For Research And Development

Howard Rosen

Occasional Paper 7

THE CENTER FOR VOCATIONAL EDUCATION
The Ohio State University • 1960 Kenny Road • Columbus, Ohio 43210

VT 102 375

THE CENTER MISSION STATEMENT

The Center for Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning and preparation. The Center fulfills its mission by:

- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs

AUG 26 1975

Occasional Paper No. 7

RECENT MANPOWER LEGISLATION AND PROGRAMS: IMPLICATIONS FOR RESEARCH AND DEVELOPMENT

by

Howard Rosen

The Center for Vocational Education
The Ohio State University
Columbus, Ohio 43210

1975

PREFACE

As a part of The Center's Occasional Paper Series designed to provide educators and other interested individuals with information dealing with critical issues and problems surrounding the education of human beings, The Center has decided to include a recent staff development presentation by Dr. Howard Rosen on the topic of "Recent Manpower Legislation and Programs: Implications for Research and Development."

Dr. Rosen, Director of The Office of Manpower Research and Development, Manpower Administration, U.S. Department of Labor, presents in his lecture, (1) a review of the climate of the 1960s and early 1970s which led to the manpower legislation and programs; (2) economic situations which, in part, account for the current state of manpower legislation and programs; and (3) the implications for research and development. Rosen's ten years of experience as the chief administrator for the Manpower Research and Development Office, places him in an ideal position to provide insight into the effectiveness of manpower programs and the research and development priorities in the area of manpower education programs.

A native of Newark, New Jersey, Rosen holds a Bachelor of Arts degree from Rutgers University (1939); Master of Arts degree from New Jersey State Teachers College (1942); and a Doctorate in Economics (1956) from The American University. Dr. Rosen's experience includes two years as an administrator in private industry; four years of teaching at Hampton Institute; and twelve years as an economist with the Bureau of Labor Statistics. In addition to his current assignment as Director, Office of Manpower Research and Development, Manpower Administration, Dr. Rosen holds the concurrent position as Professional Lecturer, School of Public Administration, George Washington University.

Dr. Rosen has been awarded a number of honors, including the Distinguished Service Award from the Department of Labor, Group Honor Award for contribution to the publication of the Report of the Manpower Conservation Task Force, "One-Third of a Nation"; Distinguished Career Service Award, 1973.

Dr. Rosen is the author of several publications including:

"The Doctorate Program of the Manpower Administration of the U.S. Department of Labor," *The Production of Manpower Specialists—A Volume of Selected Papers*, Cornell University, 1971

"Social Research: A Challenge to the New Generation," *Growth and Change*, University of Kentucky, April 1970

"Vocational Guidance: Room for Improvement," *Manpower*, Volume 1, No. 7, U.S. Department of Labor, Manpower Administration, August 1969

"Manpower Supply in the United States," *National Vocational-Technical Education Seminar in Occupational Mobility and Migration*, North Carolina State University at Raleigh, April 1966

"Vocational Education: Training for Yesterday's Jobs?" *Occupational Outlook Quarterly*, Vol. 10, No. 2, U.S. Department of Labor, Bureau of Labor Statistics, May 1966.

On behalf of The Center for Vocational Education, I take pleasure in introducing Dr. Rosen's lecture, "Recent Manpower Legislation and Programs: Implications for Research and Development."

Robert E. Taylor
Director
The Center for Vocational Education

RECENT MANPOWER LEGISLATION AND PROGRAMS: IMPLICATIONS FOR RESEARCH AND DEVELOPMENT

I have been asked to discuss the implications for research and development which have evolved from the recent manpower legislation and programs. Before I get to the specifics of my topic, I should like to review the climate of the 1960s and early 1970s which led to the manpower legislation and programs. Furthermore, I want to discuss the economic situation in which we find ourselves in 1975 and then move on to the implications for research and development.

During the early 1960s, a good deal of discussion and fear about automation and technological change and obsolete skills led to the passage of the Manpower Development and Training Act. In 1961, we had an unemployment rate of 6.7 percent with about 4.7 million people unemployed. We had about 70.5 million in our civilian labor force. By 1962, the year the Manpower Act was passed, the unemployment rate had dropped to 5.5 percent and the number of unemployed had declined to less than 4 million.

The Manpower Development and Training Act of 1962 established a centralized decision-making system in which the important decisions as to the distribution of funds among clients were made in Washington. The act also called for assistance to categories of persons, e.g., ex-offenders, Spanish-speaking and others.

After eleven years of experience with the MDTA, the Congress, the administrators of the act and the administration had concluded that the act was not really meeting the desired objectives of providing the best and most effective manpower services to those needing training and other services. To set the record straight, the dissatisfaction with the way the MDTA was providing services had started long before 1973 when Mr. Nixon signed the Comprehensive Employment and Training Act.

CETA, which is the acronym for the new act, calls for the establishment of a flexible and decentralized system of federal, state and local manpower programs for ". . . economically disadvantaged, unemployed and underemployed persons." Thus, although the basic clients are the same as those identified in the MDTA, the decision-making system is quite different. As noted earlier, almost all decisions were made in Washington under the MDTA. Under CETA, many of the toughest decisions as to who gets the manpower money and who delivers the training and other services are made under the general jurisdiction of the political leader known as the prime sponsor.

Although the decision-making system has been drastically changed, the categorical issues have not been completely clarified. Many of the same categorical groups identified in the original legislation are still part of the scene under CETA.

Let met note that when the CETA legislation was signed in 1973 we had an average annual rate of unemployment of less than 5 percent. We had 4.3 million unemployed—only about 400,000 more

than in 1962 when the MDTA was enacted. Although there was little difference in the number of unemployed in 1962 and 1973, the number of workers in our civilian labor force had grown by 26 percent from 70.6 million to 88.7 million. Thus, our economy had developed more than 17 million new employment opportunities during the eleven-year period. This explains why we were able to place most of those trained in the manpower programs. In 1973, we were able to place more than 60 percent in jobs.[1]

During the same eleven-year period, some very significant shifts also took place in the kinds of clients served. For example, in 1963, more than three-quarters of the trainees in institutional training programs were white. By 1973, the proportion of white trainees had dropped to 66 percent. The percentage of black trainees had risen from 21 percent to 31 percent. Almost 60 percent of our clients were classified as in a poverty status. Interestingly enough, 31.5 percent of our trainees were Unemployment Insurance claimants in 1963. But by 1973, less than 10 percent were UI claimants. Keep these figures in mind when we talk about our problems in 1975.

It is far too soon to pass judgment on whether the Comprehensive Employment and Training Act is doing a much better job in providing service than the MDTA. We will not know for another year or two whether the prime sponsors—the governors—and the mayors are providing new wine in new bottles or providing old wine in old bottles or providing combination offerings. The wine tasters of the future—sometimes known as evaluators—will eventually provide us with answers to these conundrums.

The evaluation of the effectiveness of CETA will be muddied by what has happened in the past five months. Somehow, the economy seemed to be poised in December 1974 as though it were a small snowball going down a hill covered with loose and adhesive snow. Without going into the details as to why and how the economy moved into the current recession, the fact is that the economy of April 1975 is not the same one that we had at the end of 1974.

In March 1975, we had an unemployment rate of 8.7 percent and some 8.0 million Americans couldn't find jobs. This is the highest unemployment rate since 1941. Our economy has lost 2.6 million jobs since September 1974. The March increase in joblessness was shared all across the board by virtually all worker groups. Blue-collar workers have been particularly hit hard by joblessness. The unemployment rate for construction workers was up, to 18.1 percent, while the rate for manufacturing workers rose for the tenth consecutive month to 11.4 percent—more than double a year ago.

Congress and the President reacted to the rise in unemployment by passing the "Emergency Jobs and Unemployment Assistance Act of 1974."[2] This piece of legislation now dominates the manpower scene. The concentration is now on public service jobs for unemployed and underemployed persons. The act also establishes a temporary federal program of special unemployment assistance for unemployed workers who are not eligible for unemployment allowances.

---

[1] Manpower Report of the President, April 1975, pp. 53.

[2] Public Law 93-567, 93rd Congress, H.R. 16596, December 31, 1974.

In reviewing the April 1975 situation, one ought to start thinking about what can the current manpower programs do to alleviate the unemployment situation. The first point that must be made clear is that not even the most devoted adherents of manpower programs are so naive as to believe that these programs, alone, can resolve the unemployment problem facing this country. Manpower programs are simply one of many tools that can be used during a recession. Fiscal and monetary stimuli must be used to create employment opportunities. Manpower programs have different functions and contributions to make during a recession than during a growth period.

The current economic downturn is the sharpest one experienced during the history of the modern manpower programs. These are two kinds of reactions we can have during a recession. We can have only a quick knee-jerk reaction to this recession or we can start to put manpower programs into new perspectives at this time. I hope that this recession will force us into thinking more broadly about the potential contributions of manpower programs in developing our human resources not only for the short run but also for the long run.

As noted earlier, the first reaction of Congress and the Administration to the sharp rise in unemployment was to put unemployed workers back on to payrolls as quickly as possible through the public service employment program. This is fastest and most efficient way to get money into the hands of unemployed workers and to provide them with jobs at the same time. Despite the short-term effectiveness of this program, it does not provide new skills and does not make a major contribution to the development of our human resources.

The question I want to raise is whether we ought not to think of using this period of recession as an opportunity to concentrate on developing our human resources for the day when unemployment will decline and employment will rise. I submit that this recession can be used to improve the skill level of thousands of workers so that they will eventually be able to move back into productive employment at higher levels of skills and earnings when the economy improves.

If we take the opportunity that time gives us, we can provide longer in-depth training than is customarily provided in the regular training programs. The Office of Manpower Research and Development has conducted demonstration programs in which workers of little skill and limited education have been given intensive training by working craftsmen from industry for periods of six months and more. These trainees have been able to earn far more than the MDTA institutional trainees who are, customarily, given shorter periods of training. More programs which are directly tied to high quality training should be tried in order to make productive use of recession time.

One of the questions that we have never faced squarely in this country is the issue of the waste of human resources. We are already beginning to hear about apprentices losing their jobs and manpower training program trainees unable to find employment. To let partially trained apprentices go and to let manpower trainees join the ranks of the unemployed is a waste of economic and human resources. We ought to do some thinking about the possibility of developing institutions or institutional arrangements which will prevent the loss of potentially trained manpower during periods of less than full employment. As a nation, we are fully prepared to pay the cost of putting military equipment into a standby basis until we need them. We have not yet accepted this concept in thinking about our human resources. If we adopted a policy of maintaining or even increasing our training posture during periods of recession, we might be better able to handle problems of the shortage of trained manpower which may contribute to inflation when the economy recovers.

Before turning to some of the R & D issues which have evolved from the recent manpower legislation, let me point out that the Comprehensive Employment and Training Act of 1973 which emphasizes decentralization—contains a title—Title III—which does not call for decentralization but, instead, calls for the establishment of a research, experimental, demonstration program and pilot projects under federal control.

Among the R & D issues which have floated to the surface is the need to examine the efficiency and effectiveness of the whole CETA system that is in the process of being installed.

We need to know more about the comprehensive manpower plans that have been developed. How are they developed? By whom? What are the qualifications of the planners? What kinds of information were used in developing plans? What kind of information is missing? What is the relationship between the proposed plan and the accomplishments during the year the plan is instituted? We need to examine, on a regional basis, the relationship among all the plans in order to determine problems of overlap and replication.

We need to know more about the planning councils established under each prime sponsor. How representative are they? How effective are they? What use is being made of the recommendations of the planning councils?

The same set of questions can be applied to the Manpower Services Councils which are supposed to review the plans of the prime sponsor and the state agencies responsible for providing services to the sponsors.

I am pleased to note that Dr. Ripley of the Department of Political Science at The Ohio State University is conducting a project for the Office of Manpower Research and Development which is attempting to analyze the performance of state and local officials and various organizational arrangements during the first year of the formal existence of CETA. The study is concentrating on administrative patterns of implementation and on patterns of client service among all CETA grantees in the State of Ohio.

The R & D component of CETA specifically directs us to establish a program which will, ". . . contribute to the formulation of manpower policy; development or improvement of manpower programs; increased knowledge about labor market processes; reduction of unemployment and its relationships to price stability; . . . ." In addition we are told to be concerned with developing improved techniques for forecasting manpower supply and demand and easing the transition from school to work, etc.

Title III of CETA contains references to youth, offenders, persons of limited English-speaking ability, older workers, veterans, Indians and migrant and seasonal farmworkers.

Now, let me turn to some of the other R & D issues which are evolving from recent manpower legislation and programs.

Here are some of the R & D questions we need to think about concerning the public service employment program which now is the tail wagging the manpower programs in the U.S.

The emergency public service employment signed by President Ford on December 31, 1974, authorizes $2.5 billion for 330, 000 new jobs. Although the legislation calls for ". . . where feasible to provide . . . related training and services," no one expects much in the way of training to be conducted under this act.

Again, I want to underscore that this country labors under the delusion that we have discovered the Holy Grail of perpetual full employment. When an economic downturn does occur we act shocked and are usually immobilized for too long a period. We act as if it can never happen to us.

We never want to acknowledge that we need to be prepared in advance for recessions. We need to have on hand an inventory of programs which should help smooth fluctuation in economic activity during a period of increased unemployment. Instead of regarding public service employment as one of our proven manpower tools we consider it as a, ". . . last ditch emergency measure rather than a staple of public policy."[3]

Some European countries have long used public service employment as a device for providing useful work experience and skill acquisition for their citizens who can't make it in the regular job market. Eventually, some of these citizens can move to nonsubsidized jobs in either the public or private sector. For most of the other participants in their public service employment programs it is transitional activity which is available only during periods of economic slow downs.

It has been suggested by some that funds should be available for public service jobs regardless of the level of national unemployment. A public service employment program can be used which will expand or contract triggered to rates of unemployment.

Some of the R & D needs evolving from the current public service employment program are:

1. How many of these jobs are really new, i.e. additional?

2. What are the costs and benefits of a public service employment program?

3. Which jobs offer the greatest transitional opportunities to unsubsidized jobs?

4. What are the institutional impediments such as civil service regulations which hinder the effectiveness of the program?

5. What impact does public service employment have on aggregate unemployment?

6. What impact does it have on the quantity and quality of public services?

7. What impact does it have on local economies?

8. Who get the jobs and what kinds of jobs do they get?

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[3]National Planning Association, *A Public Service Employment Program: Effective Manpower Strategy*, Report No. 137, Washington, D.C., July 1974, p. 1.

9. Do we need a triggering device for public service employment programs?

10. If so, at what level of unemployment should the trigger go off?

11. What are the possibilities of public service employment as a substitute for sheltered work shops?

The Department of Labor and several other federal agencies, in cooperation with Ford Foundation, are now engaged in a national demonstration project on supported employment which may provide some of the answers to the questions I have raised.

Some of the longer term issues we are exploring include:

A major effort to bring in under manpower programs a group of disadvantaged clients requiring special and innovative programs. We are providing "supported work" for former drug addicts, ex-offenders, school dropouts and welfare mothers. Persons participating in the program in thirteen cities will work for public and private employers doing housing maintenance and rehabilitation, neighborhood beautification, and providing services to the elderly. These workers will be given paychecks for performing work while they develop an employment record. It is hoped that most or all of these workers will be eventually moved off supported work to unsubsidized private or public jobs.

Another major R & D effort will be concerned with an experimental project to test whether income assistance provided to ex-offenders as they leave prison will reduce recidivism. This concept of transitional income to ex-offenders has been tried on a limited scale in the State of Maryland. We now expect to test it on a larger scale in two other states. If the findings of our Maryland project are replicated on a larger scale, we may come up with a new and significant technique for reducing recidivism among ex-prisoners in the U.S.

Despite the downturn in the economy, we are expanding to seven cities a successful program for placing professionally trained minority women who are underutilized and unemployed in jobs commensurate with their training and skills. This demonstration project was conducted in Atlanta and Houston and is now being tested in five other cities. We are learning that we can answer the arguments of employers that they cannot find qualified minority applicants for professional jobs if we do a careful screening and recruitment job. We have already placed more than 200 minority women in jobs in two cities. Most of these women are working in jobs in which minority women had never been employed and some are working in jobs in which the employers had never used women.

One of the greatest R & D needs which existed under the MDTA and still exists under CETA is to develop an R & D strategy which can improve the Employment Service and make it into a more effective and efficient manpower instrument that will be more responsive to the clients it serves on a local and national level. Considerable effort is being devoted within the Department of Labor to develop a long-term strategy to improve the productivity of the E.S. and to make it into a more flexible public institution so that it can be more useful under different economic and social conditions as a labor market exchange institution.

One of the areas of greatest needs that the Office of Manpower Research and Development faces is for the development of a two-way communication system between a centralized R & D program and a decentralized operational program. We need to learn more about the needs of the local manpower administrators and operators so that the R & D program can provide them with the tools and information they need in order to do a better job in decision-making and the delivery of service to clients. The two-way communication system must also provide a flow of information and ideas from Washington to the field.

This does not mean that we want to set up a service operation for every administrator who needs data. The only kind of R & D work that can make sense for a communication system must depend on models that can be exported and applied elsewhere.

A last area of R & D need that seems to be perpetually with us is the old issue of transition from school to work. Some of the work done by Dr. Herbert Parnes of Ohio State in his longitudinal study of young workers has given us a new perspective about the mobility and job hopping pattern of young workers. Dr. Parnes' data suggest that some of this job-hopping is essentially a test of the labor market. Young workers often move from job to job in order to improve their status and learn about different kinds of jobs, i.e. working conditions, skill requirements, wages and advancement opportunities. In fact, many job-hoppers end up with higher wages than those who stay fixed with one employer.

Our office is concerned with the 1.6 million young persons who graduated from high school in 1974. The 1.4 million young men and women of the class of '74 who enrolled in college are, at least temporarily, not a problem today. We may be worried about them in 1978.

Above, all, we are most concerned with the 800 000 youth, predominantly sixteen-nineteen years old, who left school during the year ending in October 1974, without receiving a diploma. More than one out of four (28 percent) of these dropouts were unemployed last year. After all the millions of dollars that have been spent to keep students in school and prepare them for the transition from school to work, we still find ourselves with this enormous number of youngsters who are not served by our educational institutions. Whether these young persons are dropouts or pushouts is not the real problem. The fact remains that we have not been able to create educational or training institutions that will enable most of these young persons to make a painless transition from school to work.

We are still looking for the ideas or programs that will contribute to the solution of the dropout problem.

My next comments are as critical toward manpower programs as they are toward our educational and training institutions. We still have had little or no impact on the unemployment rates of black youngsters in our society. When we started the manpower programs in 1963, black young men—ages sixteen and seventeen—had an unemployment rate of 27 percent. Ten years later, after millions of dollars of expenditures on the manpower and educational system, their unemployment rate had gone up—not down—to 34 percent. The rate for black teenage girls has remained above 30 percent since 1963.

In March 1975 the unemployment rate for black teenagers—sixteen-nineteen for both sexes—has reached a tragic level of 41.6 percent. This means that two out five black teenagers looking for jobs cannot find one.

The employment and unemployment problem of black teenage young men and women was and is a priority item for our R & D program. Unfortunately, we have now reached a stage of sophistication and skepticism which forces us to warn most of the proposal makers that we are no longer interested in replicating that which has been tested and failed in the past. Unless, a research or experimental or demonstration idea recognizes the failures of the past and suggests an innovative approach to the difficult and complex problem of black teenage unemployment, we are not interested in providing support.

Let me add one final note as an administrator of a social science R & D program for the past ten years. In looking over what we have funded in the past it becomes apparent that we serve many masters. Our R & D program must be responsive to the Secretary of Labor and his assistants. We must also provide information and assistance to those who administer and operate manpower programs at the national and local level. We also must support R & D projects which produce findings useful to Congress, educators, employers, and parents.

In order to run a meaningful R & D program we must not only support short-term projects but also long-term ones. The diversity of the projects we support may be compared to the portfolio of investments that a financial manager builds up for his clients. The portfolio must take into account a great variety of current needs and the anticipation of future needs of a highly dynamic economy. The priorities I have referred to today represent just one level of potential future investments. Changes in social and economic trends will call for new priorities in the years ahead.

As we have experienced the short-term issues of our society, we have always tried to balance our portfolio by recognizing that there are certain problems that will not recede or disappear in a decade or two. Hopefully, our assessment of these long-term issues will enable us to make a major contribution in information and ideas for attacking the more persistent problems of our society.

RESPONSE TO QUESTIONS

1. Question

In your presentation, you spoke of a project which provided training and placement of minority women in the labor market. What kind of training is provided?

Response

Our project, "Minority Women Employment" does not provide training. We are taking minority women with professional training who are either unemployed or underemployed and trying to place them in professional jobs commensurate with their training. We have gone to the leading employers in Atlanta and Houston and tried to determine their professional employment needs. A careful effort has been made to match properly trained professional women with the available vacancies. In many cases, employers have taken on women in jobs in which women have never been used before. In other cases, employers are taking on minority employees for the first time. The effort essentially represents an ideal case of worker-job matching.

2. Question

What attempt has been made to compare the job training efforts of public and private vocational education programs with those of manpower training programs?

Response

We have made comparisons among all types of training programs and have concluded that all of these programs have different contributions to make. The type of worker and kind of job and employer really determine the kind of institutional training that is best.

The educational and skill level of some workers require intensive training and supportive services that cannot be supplied in regular public and private vocational schools. Other workers only need skill training and are not in need of supportive services.

There is no one best way to train. We need a variety of systems in order to meet the needs of a highly diversified labor force and job market.

3. Question

What are the problems that exist under the influence of minimum wage and public assistance laws?

Response

We don't see any real problems that exist under either of these laws. The difficulty is finding jobs for people after they are trained. Hopefully, the trainees should be productive enough to satisfy employers that they are worth being paid minimum wages. The welfare laws direct the Department of Labor to try to place eligible welfare recipients in training and find them jobs at the conclusion of training. Our research studies tell us that the welfare population has the same interest in employment as the rest of the population.

4. Question

What progress has been made in terms of being able to accurately project employment needs regionally and nationally?

Response

The Comprehensive Employment and Training Act requires better manpower projections on a regional and local level. The Manpower Administration has a unit concerned with improving labor market information. We expect to have considerably improved projection techniques in the near future.

The Bureau of Labor Statistics has been developing national projections for several decades. It is constantly seeking better techniques.

I just want to caution those who are quick to criticize the work of those who do the projections. Many of the critics fail to realize that projections contain within them the seeds of self-destruction. For example, a projection of a shortage of engineers attracts an increasing number of students into this field. This increased interest meets the shortage and therefore, none develops. When the critics say that no shortage developed, they fail to take into account the flow of applicants into a field which is very often stimulated by the projection.

5. Question

What is being done to develop a data base to look at accountability or evaluation under CETA rather than simply political accountability?

Response

Our evaluation office is developing a longitudinal study of CETA trainees which will examine the before and after condition of persons who came into CETA programs. Our administrative and program people are also developing data systems which will require CETA sponsors to account for their accomplishments under the act.

6. Question

Are there provisions in CETA which allow for state and local agencies with CETA grants to obtain technical assistance?

Response

The Assistant Regional Directors for Manpower, the prime sponsors and the State Employment Services are being contacted about their technical assistance and staff training needs. Funds will be provided for technical assistance. Under Title I, prime sponsors can also use their own money to buy technical assistance at a local level.

7. Question

What kinds of trends do you see relative to responsibility in placement of school graduates?

Response

This responsibility will depend on local leadership and responsiveness to the needs of students. I am in favor of as many institutions as possible helping students in making the transition from school to work. I don't think that the Employment Service has a monopoly hold on this responsibility. Frankly, the more involvement by schools, employers, parents, social organizations, the better for the students. I believe that future trends will find much more involvement by different groups than we have ever had in the past.

ACCESSION NUMBER: VT102380

PUBLICATION DATE: AUG75

TITLE: SUPPLY AND DEMAND FOR VOCATIONAL AGRICULTURE TEACHERS IN WASHINGTON STATE, 1975 AND 1976.

PERSONAL AUTHOR: ORLICH, DONALD C.; RUST, GARY A.

DESCRIPTOR: *TEACHER SUPPLY AND DEMAND; *VOCATIONAL AGRICULTURE TEACHERS; *SCHOOL SURVEYS; *TREND ANALYSIS

IDENTIFIER: WASHINGTON

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 57P.

ABSTRACT: THE PURPOSE OF THIS STUDY WAS TO DETERMINE THE SUPPLY AND DEMAND FOR VOCATIONAL AGRICULTURE TEACHERS IN THE STATE OF WASHINGTON FOR 1975-76. PRIMARY SOURCE DATA WERE COLLECTED FROM THE WASHINGTON STATE SUPERINTENDENT OF PUBLIC INSTRUCTION AND INSTITUTIONAL INFORMATION WAS OBTAINED FROM STATE UNIVERSITIES IN WASHINGTON, MONTANA, UTAH, OREGON, AND IDAHO. ALL SECONDARY SCHOOLS IN WASHINGTON WERE SURVEYED BY QUESTIONNAIRE, WITH A 97 PERCENT RETURN RATE. FROM THE DATA COLLECTED AND ANALYZED IT WAS CONCLUDED THAT THE SUPPLY OF VOCATIONAL AGRICULTURE TEACHERS IN THE STATE OF WASHINGTON IS ALMOST EQUAL TO THE DEMAND AND MAY BE ADEQUATE. THE DEMAND MAY SLIGHTLY EXCEED THE SUPPLY BY 1976, AS THERE HAVE BEEN CONTINUED INCREASES IN CLASS SIZES, ENROLLMENTS, AND OFFERINGS IN VOCATIONAL AGRICULTURE DURING THE 1970'S. SURVEY RESULTS ARE PRESENTED IN THE REPORT, ALONG WITH THE FORMULA USED TO PREDICT TEACHER SUPPLY AND DEMAND. THE RESULTS OF THE STUDY WILL BE USED BY WASHINGTON STATE UNIVERSITY FOR CURRICULUM PLANNING AND BY THE STATE IN ESTABLISHING INSTRUCTIONAL POLICY. THE RESULTS WILL ALSO BE OF VALUE TO SCHOOL DISTRICTS FOR IDENTIFYING TRENDS IN PROGRAM AND TEACHING NEEDS. (AUTHOR/MF)

SPONSORING AGENCY NAME: WASHINGTON STATE UNIV., PULLMAN. COLL. OF EDUCATION.

VT 102 380

SUPPLY AND DEMAND

FOR VOCATIONAL AGRICULTURE TEACHERS

IN WASHINGTON STATE, 1975 and 1976

C. 2

SUPPLY AND DEMAND

FOR VOCATIONAL AGRICULTURE TEACHERS

IN WASHINGTON STATE, 1975 and 1976

by

Donald C. Orlich

and

Gary A. Rust

The material reported herein was performed pursuant to a grant from the Research Fund of the College of Education at Washington State University. Investigators undertaking such projects are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore necessarily represent the official position or policy of the College of Education or Washington State University.

Washington State University
College of Education
Office of Field and Research Services
Pullman, WA 99163
August 1975

Acknowledgments

We wish to acknowledge Mr. Art Nelson, Program Director of Vocational Agriculture and Renewable Natural Resources and Mr. Gene Forrester, Program Supervisor of Vocational Agriculture, Office of State Superintendent of Public Instruction, Olympia for their invaluable assistance in obtaining primary source and other previously unreported data. A special note of appreciation goes to all the Vocational Agriculture teachers and high school principals who responded to the survey and to John Schlotfeldt who aided in the original design of the study. Tammy Siebenberg and Bienvenida Pfeifer provided the secretarial assistance for the project and typed the manuscripts and camera ready copy for printing. The Duplicating and Mailing Services at Washington State University printed and bound the report.

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Abstract

Introduction. The purpose of the study was to determine the supply and demand for Vocational Agriculture (Vo-Ag) teachers in Washington State for 1975-76. Primary source data were collected from the files of the Washington State Superintendent of Public Instruction. Institutional information was obtained from the Vc-Ag teacher program directors at Washington State University, Montana State University, Utah State University, Oregon State University and the University of Idaho. A questionnaire was mailed to all 311 secondary schools in Washington to obtain information relating to the topic. A total of 302 instruments were completed accounting for a 97 percent return rate.

General findings. All generalizations refer to Vo-Ag classes or teachers.

1. There has been a continued increase in class sizes, enrollments and offerings in Vo-Ag during the 1970's.
2. There is a general increase in the number of high schools offering Vo-Ag courses.
3. Vo-Ag teachers generally perceived their teaching loads to be heavier than those of other teachers.
4. Those high schools with no Vo-Ag program reported three basic reasons for the absence: (a) lack of student interest, (b) no need for the curriculum and (c) no certified Vo-Ag teacher available.
5. The Vo-Ag teacher cohort tends to be somewhat younger than the total state teaching corps.
6. Vo-Ag teacher loss and mobility appears to be less than that of the state's teaching corps.
7. Vo-Ag teachers who leave teaching do so for retirement or moves to farming, agri-business or business.
8. Enrollments of five Vo-Ag teacher preparatory universities seems to be in a steady-state, except for Utah State University which reported 100 percent increase in expected enrollments for the 1975-76 school year.
9. Washington draws few non-experienced teachers from out-of-state, with Washington State University the primary source of supply.
10. The Demand seems to exceed the Supply for 1976 by a range of from 3 to 18 teachers, depending on variables used.
11. Five factors affecting supply and demand for Vo-Ag teachers should be investigated to determine more accurately the demand.

SUPPLY AND DEMAND FOR
VOCATIONAL AGRICULTURE TEACHERS IN WASHINGTON STATE
1975 and 1976

Purpose of the Study

The College of Education at Washington State University funded a study to determine (1) the supply and demand and (2) the present and near future needs for Vocational Agriculture (Vo-Ag) teachers in Washington. The results of the study will be used by Washington State University for curriculum planning and by the Office of the State Superintendent of Public Instruction for guidance in establishing instructional policies. The results will also be of value to all school districts for identifying trends in Vo-Ag program and teacher demands.

In addition, the study may provide some data that will be useful in determining the need to expand the Vo-Ag teacher program at Washington State University or to add Vo-Ag teacher programs at other institutions of higher education. Since supply and demand data for Vo-Ag are critical to either program expansion or program initiation, the study may act as a preliminary data source for decision-makers at the Board of Regents level.

Method

The study was divided into four basic phases. The first phase consisted of data collected from the Office of the Washington State Superintendent of Public Instruction. The data include such items as the number of students enrolled in Vo-Ag classes, the number of Vo-Ag teachers, the number of Vo-Ag classes being taught, the types of certificates held by Vo-Ag teachers, the number of high schools offering Vo-

Vo-Ag courses, age and experience of Vo-Ag teachers, and primary reasons for teachers leaving Vo-Ag teaching.

The second phase of the study involved surveying the major higher education institutional sources for Washington Vo-Ag teachers. The five institutions that were identified as being major sources of Vo-Ag teachers for Washington were Washington State University, University of Idaho, Oregon State University, Montana State University, and Utah State University. These institutions were surveyed to determine the number of Vo-Ag graduates who seek teaching positions in Washington. Past trends and possible future input to Washington's Vo-Ag programs were requested from these universities.

Phase three consisted of a survey of all secondary schools in Washington. Of the 311 questionnaires which were mailed, 302 were returned. This is a 97 percent return rate. Accepted follow-up techniques were used to increase original returns (i.e., follow-up post cards, second questionnaires, and telephone interviews).

The purpose of the survey instrument was to determine: (1) the number of schools planning to implement new Vo-Ag programs, (2) plans for current Vo-Ag program expansions or reductions, (3) the need for more Vo-Ag teachers, and (4) the number of Vo-Ag teachers leaving their positions. No attempt was made to gather data for program evaluation or for identifying specific courses offered. The data which were collected were used solely for identifying Vo-Ag teacher supply and demand for the State of Washington.

The fourth and final phase of the study consisted of data analysis. The data obtained from the high school survey were key-

punched on data cards and analyzed with the aid of a computer. Keypunch operators were instructed to punch a zero in the data card when comments were written by a respondent. The appearance of the zero on the computer print-out was used as a flag by the researchers so that all comments could be read and analyzed.

Frequency distributions were computed for total responses, and responses (1) from schools with a Vo-Ag program, (2) from schools without a Vo-Ag program, (3) from small schools (less than 500 students), (4) from large schools (500 students or more), (5) received before May 18, 1975, and (6) received after May 18, 1975.

The frequency of data distributions received before May 18 were computed separately so that the researchers could ascertain if early responses differed significantly from later responses. It was assumed that late respondents may not have had a personal interest in the survey topic, therefore, would not have completed the instrument as carefully as early respondents. However, no differences were observed in the patterns of late returns.

The data from the high school survey, the university survey, and the information from the Washington State Superintendent of Public Instruction (SPI) are reported herein.

Results

There were three major concerns about Vo-Ag teacher supply and demand in Washington: (1) Are teachers of Vo-Ag classes properly trained and certified? (2) Are schools currently operating Vo-Ag programs with the proper number of Vo-Ag teachers? and (3) Will a greater or fewer

number of Vo-Ag teachers be needed in the near future? Each concern is addressed separately.

Vo-Ag Teachers--Preparation and Certification

Table 1 shows the total number of Vo-Ag teachers in Washington from 1970-71 through 1974-75. Of the 220 Vo-Ag teachers who taught in 1974-75, 34 held special certificates. (This information was obtained from the files of the SPI.) A special certificate is awarded to a teacher who does not hold a degree in Agricultural Education* but is judged to be qualified to teach a specified Vo-Ag course. Job experience or special coursework in a specific area is the usual requirement for a special certificate. Such certificates are usually awarded for one year only, but may be renewed. Although it is usually desirable to have all Vo-Ag teachers holding a degree in Agriculture Education, it is not feasible in all cases because many teachers must teach a variety of subjects. However, attempts should be made to recruit the highest possible number of Vo-Ag teachers holding a degree.

Thus, it appears that 84 percent of the Vo-Ag teachers hold full certification; while 16 percent do not. Since we did not examine individual transcripts of the latter 16 percent no definitive conclusion about preparation may be drawn about these individuals. In some cases persons holding the special certificates teach one class. Whether it would be feasible to hire a fully-certificated Vo-Ag teacher for such schools or classes is a question beyond the scope of this study.

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*See Appendix A for the requirements for a B.S. degree in Agricultural Education at Washington State University.

Further, 148 Vo-Ag teachers taught Vo-Ag courses/classes on a full-time basis during 1974-75. This number accounts for 63 percent of the total. Thirty-seven percent taught Vo-Ag on less than a full-time basis. These statistics may have great relevance on supply and demand.

Table 1

Number of Vocational Agriculture
Teachers in Washington State 1970-71 through 1974-75

Academic Years	Number
1974-1975	220
1973-1974	203
1972-1973	184
1971-1972	177
1970-1971	163

Source: Coordinating Council for Occupational Education Directory of Teachers. (Note: as of July 1, 1975, the CCOE has been renamed and replaced by the Washington State Commission for Vocational Education.)

The Numerical Status of Vo-Ag Teachers

Table 2 shows a trend of increased class size for Vo-Ag courses from 1970-71 to 1973-74. The total enrollment trend is up with an increase of nearly three students per class--from 18.4 to 21.3. It might be observed that 21 students in activity courses such as Vo-Ag could cause problems in safety, supervision, and teacher-student interaction.

Table 2

Number of Students Enrolled in Vocational Agriculture Classes in Washington High Schools 1970-1974[a]

Academic Year	Number of Students Enrolled[b]	Total Number of Classes	Mean Class Size
1973-1974	20,918	981	21.3
1972-1973	18,483	952	19.4
1971-1972	16,443	894	18.4
1970-1971	14,679	794	18.4

[a]Does not include enrollment for agriculture preparation classes, i.e., non-Vo-Ag classes. Source: Coordinating Council for Occupational Education Print-out #1083.

[b]Unadjusted enrollment figures. Some students are duplicated in these figures.

Table 3 shows that not only are Vo-Ag class sizes increasing, but that on the average Vo-Ag teachers instruct more students per day. The average number of students per Vo-Ag teacher has increased from 90 in 1970-71 to 103 in 1973-74.

Table 3

Students per Teacher Ratio for Vocational Agriculture Teachers in Washington 1970-1974

Academic Years	Number of Vo-Ag Teachers[a]	Number of Students Enrolled in Vo-Ag Classes[b]	Vo-Ag Students per Vo-Ag Teacher
1973-1974	203	20,918	103
1972-1973	184	18,483	101
1971-1972	177	16,443	93
1970-1971	163	14,679	90

[a]Not necessarily Full-time Equivalents (FTE), but absolute numbers.

[b]The number of enrolled students contains duplicate enrollments (i.e., students may be counted 2 or more times if enrolled in 2 or more Vo-Ag Classes). Sources: (1) Coordinating Council for Occupational Education Directory of Teachers and (2) Print-out #1083.

The data displayed in Tables 2 and 3 prompted the researchers to investigate how the Vo-Ag teachers were coping with the increased student enrollment. Table 4 shows the response rate obtained from the high school survey item which asked general statements about teacher load and preparation time. It can be observed that preparation time allowed for Vo-Ag teachers as perceived by them is probably not much different from that of most teachers in the high school. However, there appears to be some perceived differences in teaching load.

Table 4

Number of Responses to High School Survey Questionnaire Items 7 and 8: "Please indicate how you perceive the teaching load of Vocational Agriculture teachers in relation to all other teachers for each of the following scales."

	Category	Number of Responses	Perc
7.	The teaching load in Vo-Ag is heavier than for most teachers in the high school.	56	3
	The teaching load in Vo-Ag is about equal to that of most teachers in the high school.	81	5
	The teaching load in Vo-Ag is lighter than for most teachers in the high school.	11	
	Totals	148	10
8.	The "conference or preparation" periods for Vo-Ag teachers are greater than for most teachers in the high school.	13	
	The "conference or preparation" periods for Vo-Ag teachers are about equal to that of most teachers in the high school.	118	8
	The "conference or preparation" periods for Vo-Ag teachers are fewer than those for most teachers in the high school.	13	
	Totals	144	10

Note: The totals will not equal 302, the number of respondents who participated in survey, since only 153 high schools offered a Vo-Ag program.

Table 4

of Responses to High School Survey Questionnaire Items 7 and 8: "Please
e how you perceive the teaching load of Vocational Agriculture teachers
tion to all other teachers for each of the following scales."

Category	Number of Responses	Percent
ching load in Vo-Ag is heavier than for achers in the high school.	56	38
ching load in Vo-Ag is about equal to most teachers in the high school.	81	55
ching load in Vo-Ag is lighter than for achers in the high school.	11	7
s	148	100
ference or preparation" periods for achers are greater than for most teachers igh school.	13	9
ference or preparation" periods for Vo-Ag are about equal to that of most teachers igh school.	118	82
ference or preparation" periods for Vo-Ag are fewer than those for most teachers igh school.	13	9
s	144	100

he totals will not equal 302, the number of respondents who participated in the
since only 153 high schools offered a Vo-Ag program.

Of the responding Vo-Ag teachers, 38 percent felt that their teaching load was heavier than that of other teachers in the high school, 55 percent stated that the loads were equal to other teachers and 7 percent stated that their teaching loads were lighter.

Comments written on the questionnaire by some respondents indicated that some of the Vo-Ag teachers were dissatisfied with their heavy teaching loads. For example, after indicating that a Vo-Ag program expansion was planned, the respondent indicated that the "Load now is a bit busy for one guy with 176 students." Others wrote that "More certified Vo-Ag teachers will be needed, but not hired;" and "Locked-in--cattle price too low."

It would appear that these are specific cases where additional Vo-Ag teachers are needed due to heavy class loads. However, we were not able to quantify the exact number of teachers needed from the data collected. It would appear that some Vo-Ag teachers are currently needed to reduce class size and/or loads. If a teacher has a one-class overload it would be difficult to justify two full-time Vo-Ag teachers. Thus, the problem of part-time Vo-Ag teachers will remain unresolved.

The Need for Vo-Ag Teachers

The question "Will there be a greater or lesser Vo-Ag teacher demand in the near future?" was by far the most difficult one for the investigators to determine. What is the demand for and what is the supply of Vo-Ag teachers? It has already been indicated that the current number of fully trained and certified Vo-Ag teachers can be improved. However, the present number of teachers will be used as a baseline for this study.

Teacher Demand

Reasons for schools to hire Vo-Ag teachers as indicated by the survey data were: (1) replacement of retiring Vo-Ag teachers; (2) replacement of Vo-Ag teachers leaving teaching; (3) addition of Vo-Ag teachers to alleviate overcrowded Vo-Ag classes; and (4) expansion of Vo-Ag programs resulting from schools implementing a new Vo-Ag program, adding more class periods to accommodate increased student enrollment, or increasing the variety of Vo-Ag courses offered.

Data from the survey indicated three main reasons why schools may reduce the current number of Vo-Ag teachers: (1) levy failures, (2) school consolidations, and (3) Vo-Ag program reductions resulting from decreased student enrollment in Vo-Ag classes or fewer types of Vo-Ag courses being offered.

Vo-Ag Program Plans

The demand for Vo-Ag teachers is illustrated by tables which follow. Table 5 shows that between the years 1970 and 1975, there has been a continued increase in the number of schools offering Vo-Ag courses in Washington State.

Table 5

Number of High Schools Offering
Vocational Agriculture Courses in Washington
1970-1975

Academic Years	Number of High Schools
1974-1975	153
1973-1974	144
1972-1973	140
1971-1972	136
1970-1971	136

Source: Coordinating Council for Occupational Education Directory of Teachers. (Note: There were 311 high schools in the state during 1974-75.)

Table 6 shows that of the 152 responding high schools in Washington currently without a Vo-Ag program, 18 have plans to add a Vo-Ag program, 122 do not have plans to add a Vo-Ag program, and 12 do not know if there are plans for a Vo-Ag program. Table 7 shows that of the 152 schools currently without a Vo-Ag program, 8 schools will implement a Vo-Ag program in 1975-76, 4 schools will implement a Vo-Ag program in 1976-77, 3 schools have plans to start a Vo-Ag program after 1977, and 37 schools did not know when a Vo-Ag program might be implemented.

Table 6

Number of Responses to High School Survey Item 3:
"If there are no Vo-Ag courses or programs in your high school, are there plans for your high school to offer a Vo-Ag course or program?"

Response	Number	Percent of Total
Yes	18	12
No	122	80
Do not know	12	8
Totals	152	100

Table 7

Number of Responses to High School Survey Item 4:
"If a Vo-Ag course or program is planned for your high school, in which year will it start?"

Category	Number Responding
1975-76 school year	8
1976-77 school year	4
After 1977 school year	3
Do not know	37
Total	52

Table 8 shows the reasons why schools are not planning to add a Vo-Ag program. "Not enough student interest" was the reason most frequently specified and "no need for agriculture training" was the second response most frequently identified by the respondents. (Note: Some respondents used check marks for two or three categories and some respondents wrote on the questionnaire that the multiple identified categories were of equal importance. All such noted responses were recorded as first rankings.)

Respondents in schools currently having Vo-Ag programs were asked to compare the 1974-75 program to their planned program for 1975-76. The results are shown in Table 9. Ninety-four schools will offer the same program, while 56 schools plan a change. Forty-five schools will expand their programs, while 11 schools plan to reduce their programs.

Table 10 shows the number of teachers who will be involved in the expansions and reductions. Eighteen teachers are needed for expansion,

but 10 teachers will be involved in program reductions. Although our computations from the reported data show a total of 8 Vo-Ag teachers needed for 1975-76, the number may not be absolute. Comments written on the questionnaires by respondents explain some of the problems in determining an exact teacher need. The confusion appears in the "Other" categories. Table 10 shows that two teachers will be needed for expansion, but one school will use a teacher already on the staff while another school will use two half-time teachers full-time. The two schools that marked the "Other" category will drop their Vo-Ag program because of a levy failure, and one school indicated their Vo-Ag teacher would switch to a non-agriculture business.

From these explanations, it appears that the eight Vo-Ag teachers calculated from the data in Table 10 might in actuality be six since two full-time equivalent teachers will be utilized from present staffs. One other school indicated that one Vo-Ag teacher "may possibly" be needed for next year, but that figure is not shown in the table.

Tables 11, 12, and 13 indicate reasons why schools may adopt their planned Vo-Ag program for 1975-76 school year. Table 11 is self-explanatory except for the "Other" category. Following are a few such response examples: "Need to add one teacher, but no facilities.", "More teachers needed, but won't be hired.", "Will teach from 3 to 6 p.m. on separate contract.", and "Levy failure, expansion was anticipated" [sic].

Table 8

Number of Responses to High School Survey Items 5 and 6: "If no Vo-Ag course or program is planned for the immediate future, please rank in order the first and second reason which best describe why a course or program will not be added."

Category	Number of Respondents Who Ranked Item in First Place	Number of Respondents Who Ranked Item in Second Place
Not enough student interest	53	22
No need for agriculture training in our school	30	14
Lack of facilities	19	22
No certified Vo-Ag teachers	17	8
Lack of money	7	19
Levy failures	4	9
Other subjects considered more important	8	12
Other	10	3

Table 9

Number of Responses to High School Survey Items 9 and 10: "Which of the following best compares this year's (1974-75) Vocational Agriculture classes/courses to next year's (1975-76) planned Vo-Ag classes/courses?"

	Category	Number of Responses	Percent of Total
9.	Fewer classes will be offered in 1975-76	11	7
	Same for both years	94	63
	More classes will be offered in 1975-76	45	30
	Totals	150	100%
10.	Fewer courses will be offered in 1975-76	10	7
	Same for both years	94	63
	More courses will be offered in 1975-76	46	30
	Totals	150	100%

Table 10

Number of Responses to High School Survey Items 11 and 12: "Next year's (1975-76) curriculum will cause which of the following to happen to your staffing pattern?"

Category	Number Responding	Number of Teachers
No changes in staffing are anticipated	117	0
More certified Vo-Ag teacher(s) will be needed (expansion assumed)	16	16
Certified Vo-Ag teacher(s) will teach other subjects (reduction assumed)	3	3
Certified Vo-Ag teacher(s) will be transferred to another school (reduction assumed)	4	5
Other (expansion)	2	2
Other (reduction)	2	2

Totals

Number of Vo-Ag teachers needed for expansion	18
Number of Vo-Ag teachers available from reduction	10
Total number of Vo-Ag teachers needed	8

Table 10

esponses to High School Survey Items 11 and 12: "Next year's (1975-76)
will cause which of the following to happen to your staffing pattern?"

ry	Number Responding	Number of Teachers Involved
in staffing are anticipated	117	0
ied Vo-Ag teacher(s) ded (expansion assumed)	16	16
o-Ag teacher(s) will subjects (reduction assumed)	3	3
o-Ag teacher(s) will be to another school ssumed)	4	5
nsion)	2	2
tion)	2	2

Totals

o-Ag teachers needed for expansion	18
o-Ag teachers available from reduction	10
of Vo-Ag teachers needed	8

Table 11

Number of Responses to High School Survey Item 13: "If no change in the number of Vo-Ag classes, check only one statement that best describes your reason for the Vo-Ag curriculum plans for next year."

Category	Number Responding
We have the proper balance of classes offered at our school	46
There is not enough student interest to warrant more classes	6
Not enough certified Vo-Ag teachers to enable a class increase	17
Vo-Ag Advisory Committee decision	1
Other	15
Total	85

Table 12 shows reasons why schools plan to increase their number of Vo-Ag classes. This item is one of the two survey items where responses varied in relation to larger schools (500 or more student enrollment). Respondents from smaller schools who planned to increase the number of Vo-Ag classes identified the primary reason for expansion as "curriculum officials felt that it was advisable." (Small schools: 7 of 21 responses; Large schools: 4 of 27 responses.)

Respondents from larger schools who planned to increase the number of Vo-Ag classes reported that expansion was due mainly because, "Student interest was high." (Large schools: 16 of 27 responses; Small schools: 6 of 21 responses.)

Table 12

Number of Responses to High School Survey Item 14:
"If increasing the number of Vo-Ag classes, check only one statement that best describes your situation."

Category	Number Responding
Student interest was high	26
Curriculum officials felt it advisable	11
Vo-Ag Advisory Committee decision	8
School patrons felt it advisable	2
Other	5
Total	52

The reasons for schools decreasing their Vo-Ag programs are shown in Table 13. The "Other" category contained explanations such as levy failure or one class was dropped because it was being taught during the teacher's preparation period.

Table 13

Number of Responses to High School Survey Item 15: "If decreasing the number of Vo-Ag classes, check only one statement that best describes your situation."

Category	Number Responding
Curriculum officials felt it advisable	3
Student interest was low	1
School patrons felt it advisable	0
Vo-Ag teacher leaving school	0
Vo-Ag Advisory Committee decision	0
Other	4
Total	8

Vo-Ag Teacher Attrition

Age and number of years of teaching experience are two key variables when investigating one type of teacher attrition--retirement. A teacher may retire at the age of 65 or after 30 years of teaching experience. Table 14 shows the age distribution of Washington's Vo-Ag teachers. The data indicate that the majority of Vo-Ag teachers are relatively young, hence not approaching retirement. Four teachers will

reach the mandatory retirement age in the next five years. Figure 1 depicts those data graphically.

Figure 1 also shows the comparative ages for the entire public school teaching corps for the state of Washington. These data are the most recent obtainable from the SPI. Although they represent the 1972-73 school year we are using them to indicate the fact that the Vo-Ag teachers are a somewhat younger group than the entire group of all teachers in the state.

Observable on both graph lines is that after age 39 there is a sharp decline in the percent in each category. As one Vo-Ag teacher commented, "After 39 you're too burned out from the job to continue!"

Table 14

Age Distribution of Vocational Agriculture Teachers in Washington State in 1974

Age[a]	Number	Percent of Total	Percent of All Washington Teachers
29 and under	69	33	27
30-34	38	18	15
35-39	32	15	12
40-44	20	9	12
45-49	18	8	11
50-54	21	10	9
55-59	10	5	7.5
60-64	4	2	6.5
65 and over	0	0	1
Totals	212[b]	100%	100%[c]

[a]Age as of September 1, 1974

[b]Ages of 8 of the total 220 Vo-Ag teachers were not reported.

Source: Coordinating Council for Occupational Education, Vo-Ag Teachers Directory Agriculture Education, 1974-75.

[c]Source: Supply and Demand Study 1972-73, SPI for all public school teachers based on ages for 1972-73 school year--the latest available data which means that these data are indicative.

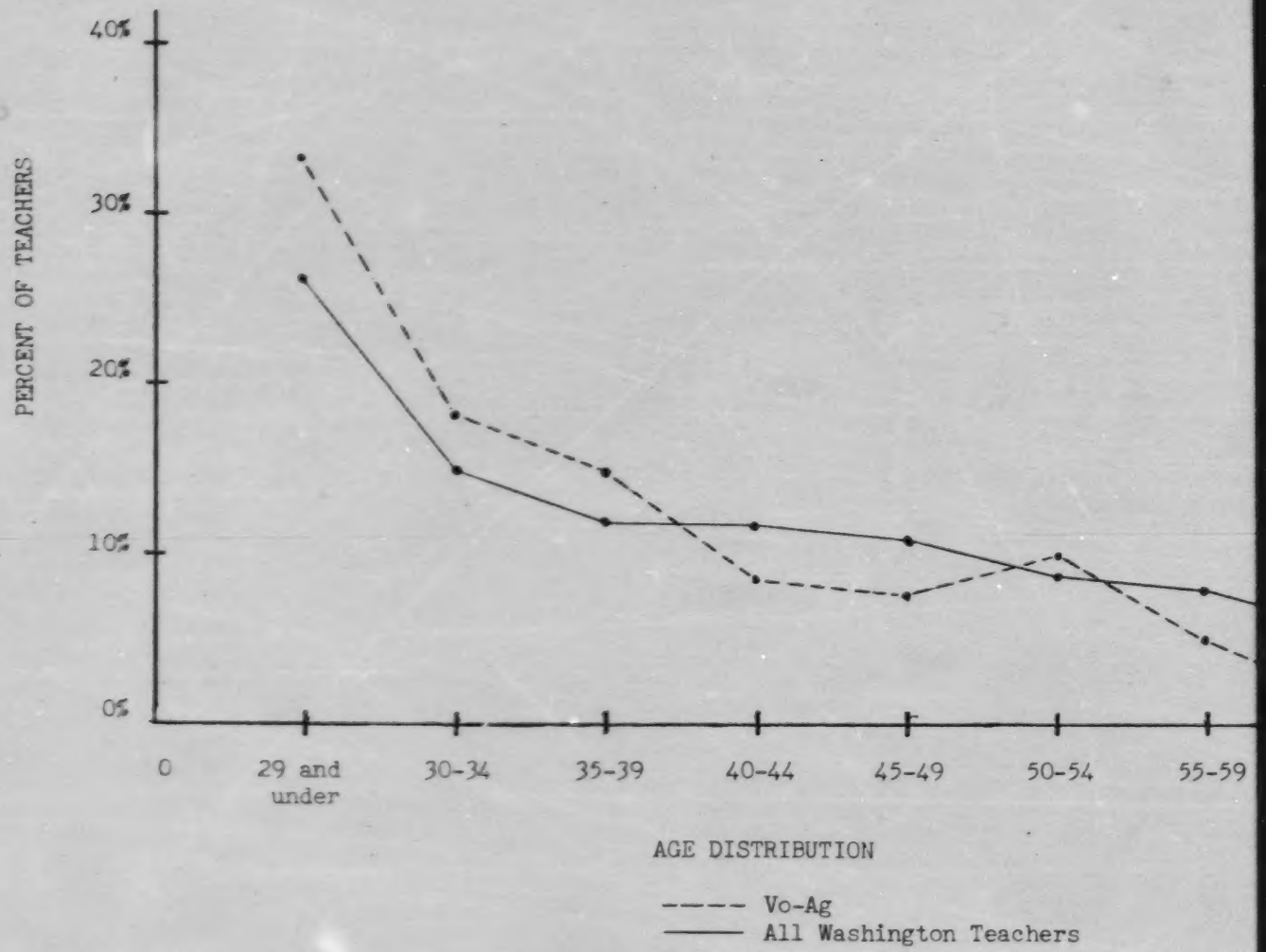
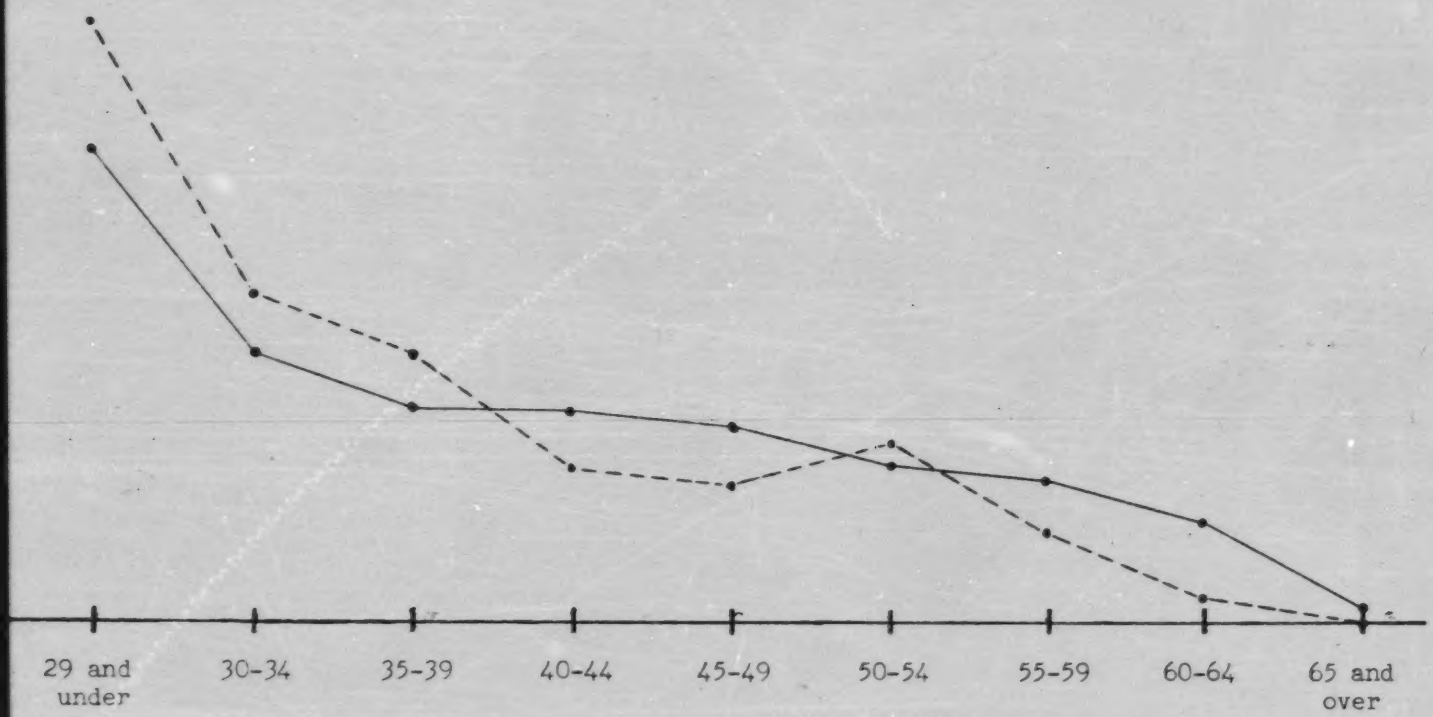


Figure 1. Age Distribution of Vocational Agriculture Teachers in Washington Stat in 1974 and all Washington Teachers.

Sources: Table 4 for Vo-Ag. Supply and Demand Study, 1972-73, SPI for all publi school teachers.



1. Age Distribution of Vocational Agriculture Teachers in Washington State in 1974 and all Washington Teachers.

s: Table 4 for Vo-Ag. Supply and Demand Study, 1972-73, SPI for all public school teachers.

The number of Vo-Ag teachers who could opt for retirement after 30 years teaching experience is shown in Table 15. The vast majority of Vo-Ag teachers are not nearing retirement with 30 years experience. Vo-Ag teachers having 25 or more years experience numbered 16. The scope of this study did not warrant personally contacting the 16 teachers to see if they were contemplating retirement after 30 years of teaching. Curriculum planners must, however, be aware of such possibilities.

Table 15

Years of Teaching Experience of Selected Vocational Agriculture Teachers in Washington State in 1974[a]

Number of Years Teaching Experience	Number of Teachers	Percent of Total	Percent for All Washington Teachers[c]
0-4	74	39	32
5-9	40	21	21
10-14	25	13	17
15-19	21	11	12
20-24	12	7	9
25 and over	16	9	9
Totals	188[b]	100%	100%

[a]Experience in Vo-Ag teaching only. Some Vo-Ag teachers also have experience in other areas.

[b]Years experience for 32 of 220 Vo-Ag teachers were not obtained.

Source: Coordinating Council for Occupational Education, "Years of Experience Vo-Ag Teaching 1974-1975".

[c]Source: Unpublished reports, Office of State Superintendent of Public Instruction. Data are for 1972-73 school year, the latest available, but adequate for an indicative comparison. The investigators derived data since original report used different five-year intervals.

Table 15 also shows that 39 percent of the state's Vo-Ag teachers have 0-4 years teaching experience. Previous research by W. W. Charters, Jr. has shown that the first five years of teaching is a most critical period for teacher retention*. During this period of time attrition is high among the group, as is mobility.

Since we had no comparative data we could not determine the mobility or turnover of the first five-year Vo-Ag teacher group. For the state of Washington in 1972-73 the turnover rate was about 11.7 percent. Thus, we could expect some attrition for the largest group of Vo-Ag teachers by age classification.

Vo-Ag teachers leave teaching for reasons other than retirement. Table 16 shows why some teachers apparently plan to leave their present schools. A difference in reasons for leaving present positions was found when comparing larger school responses to smaller school responses. Smaller schools were more likely to lose their Vo-Ag teachers to non-agriculture business (3 of 9 teachers leaving). Larger schools tended not to lose any Vo-Ag teachers to non-agriculture business (0 of 9 teachers leaving).

As the note at the bottom of Table 16 explains, 8 teachers will probably move to other schools in Washington, not causing any teacher demand. Therefore, of the 18 Vo-Ag teachers leaving schools, 8 will probably move to other schools resulting in a teacher demand of 10. In addition to the computed quantity of 10 teachers, 4 additional teachers indicated there was a possibility they would leave their schools. Such indecisive

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* W. W. Charters, Jr., "Some Factors Affecting Teacher Survival in School Districts," American Educational Research Journal, Vol. 7, pp. 1-27, January 1970.

responses are not included in the data shown in Table 16, but are simply reported as possible sources for variance in absolute numbers.

Table 16

Number of Responses to High School Survey Items 16 through 28: "If Vocational Agriculture teachers are leaving your school during 1975 for any of the following reasons, please place the number of those leaving on the appropriate line(s)."

Category	Number Responding	Number of Teachers Leaving
Do not know	2	2
Retiring	2	2
Moving to administration	0	0
Moving to Community College	0	0
Teaching in another state	0	0
Switching to farming	1	1
Switching to agri-business	0	0
Switching to non-agriculture business	3	3
Switching to non-agriculture teaching	0	0
Serving in military	0	0
Deceased	0	0
Attending graduate studies	2	2
Moving to another school	6	7
Other	1	1
Totals	17	18

Total replacements needed in Washington for 1975-76 ------ 10

Note: The seven teachers moving to other schools in the state will not cause a teacher demand. The one "Other" teacher will more than likely also teach in Washington.

Table 17 shows the reported reasons for teachers leaving Vo-Ag teaching for the years 1972 through 1975. The four main reasons are: retirement and moves to farming, agri-business, and non-agriculture business, respectively.

The percent of Vo-Ag teachers who leave teaching in Washington each year is shown in Table 18. The data indicate that 1975 had fewer teachers leaving Vo-Ag than any other year since 1972.

Table 17

Reasons for Vocational Agriculture Teachers Leaving Teaching of Vocational Agriculture in Washington Secondary Schools 1972-1975

Reasons	Years					
	1972	1973	1974	1975	Totals	% of Total
Retired	1	6	5	2	14	22
Moved to administration	2	2	1		5	7
Moved to Community College		1			1	1
Teaching in another state	3	1	3		7	10
Farming		5	4	1	10	15
Agri-business	2	3	6		11	16
Non-Agriculture business		2	3	3	8	12
Teaching Non-Agriculture	1				1	1
Military	1		1		2	3
Deceased	1				1	1
Graduate Study		2		2	4	6
Don't know	1	1		2	4	6
Totals	12	23	23	10	68	100%

Sources: (1) Coordinating Council for Occupational Education Summary of Agriculture Teachers Who Have Left High School Teaching Since 1968 and (2) Washington State University 1975 Vocational Agriculture Survey.

Table 18

Percent of Vocational Agriculture Teachers Leaving Teaching of Vocational Agriculture in Washington Secondary Schools 1972-1975

Last Year of Teaching	Number Leaving Teaching	Total Vo-Ag Teachers Teaching	Percent of Total Who Left
1975	10	220	4.6
1974	23	203	11.3
1973	23	184	12.5
1972	12	177	6.8

Sources: (1) Coordinating Council for Occupational Education Directory of Teachers, (2) Coordinating Council for Occupational Education Summary of Agriculture Teachers Who Have Left High School Teaching Since 1968, and (3) Washington State University 1975 Vocational Agriculture Survey.

Supply

There are two main supply sources for Vo-Ag teachers for Washington: (1) New graduates in Vo-Ag and (2) Experienced Vo-Ag teachers returning to the profession. The task of estimating the number of experienced Vo-Ag teachers who return to the profession for any given year is difficult to compute and was beyond the scope of this study. The number is estimated to be very small, hence should not seriously affect the supply data. Accurate data are, however, available for new graduates in Vo-Ag. Table 19 shows the major higher education sources for Washington Vo-Ag teachers in 1973. The data indicate that Washington State University has supplied about 60 percent of the total Vo-Ag teachers. There may also be some Washington State University graduates in the unknown category which our data did not reveal.

The following data indicate that in recent years comparatively few new graduates came from out-of-state schools. Also, of the 29 Vo-Ag teachers recorded in the "Other" category, 9 were graduates of Washington schools other than Washington State University. (None of the other Washington institutions has a Vo-Ag teacher preparatory program.)

Table 19

Major Higher Education Sources for All Washington Vocational Agriculture Teachers Who Were Teaching in 1972-1973

University	Number	Percent of Total
Washington State University	120	60
University of Idaho	14	7
Oregon State University	6	3
Other (18 different institutions)	29	15
Unknown	31	15
Totals	200	100%

Source: Teacher Conference Report Vocational Agriculture and Renewable Natural Resources Education July 23-27, 1973.

Table 20 shows the northwest region universities having Vo-Ag programs. These are Washington State University, Montana State University, University of Idaho, Utah State University, and Oregon State University. The data indicate that at these schools nearly all of the students who receive a Bachelor's degree also receive a teaching certificate and vice versa.

Table 20

Responses to University Survey Items 1 and 2: "How many Vo-Ag teachers graduated from your institution with a Bachelor's degree and received a valid teaching certificate for each of the following years?"

Year	Preparation	Washington State University	University of Idaho	Oregon State University	Utah State Universi
1974	Bachelor's Degree	25	7	8	8
	Teaching Certificate	24	7	8	8
1973	Bachelor's Degree	23	11	17	11
	Teaching Certificate	24	11	17	12
1972	Bachelor's Degree	17	9	13	13
	Teaching Certificate	17	9	13	13
1971	Bachelor's Degree	16	15	17	11
	Teaching Certificate	16	15	13	11

NR -- Not Reported

Table 20

Responses to University Survey Items 1 and 2: "How many Vo-Ag teachers graduated from your institution with a Bachelor's degree and received a valid teaching certificate for each of the following years?"

reparation	Washington State University	University of Idaho	Oregon State University	Utah State University	Montana State University
achelor's Degree	25	7	8	8	17
eaching Certificate	24	7	8	8	NR
achelor's Degree	23	11	17	11	19
eaching Certificate	24	11	17	12	NR
achelor's Degree	17	9	13	13	22
eaching Certificate	17	9	13	13	NR
achelor's Degree	16	15	17	11	14
eaching Certificate	16	15	13	11	NR

eported

The types of positions entered by Vo-Ag teacher graduates of the class of 1974 are shown in Table 21. The data indicate that the vast majority of students do not leave their home states. Also, the great majority (92%) of Washington State University Vo-Ag graduates entered a Vo-Ag teaching position in the state.

Table 21

Responses to University Survey Item 4: "What percent of the Vo-Ag teacher graduates, class of 1974, entered the following type of position?"

Position	Washington State University	University of Idaho	Oregon State University	Utah State University
Teaching Vo-Ag in your state	92	86	75	62.5
Teaching Vo-Ag out-of-state	0	0	0	25.0
Not teaching Vo-Ag	8	14	25	12.5
Totals	100	100	100	100

Table 22 indicates the number of Vo-Ag teacher graduates expected from the region's universities in 1975 and 1976. Since Washington cannot expect a significant number of graduates from out-of-state schools, only the graduates from Washington State University are important to the study. (Note: The data supplied by Montana State University could not be compared to the other schools.)

The responses from four of the institutions which provide Vo-Ag teachers indicate that the number of juniors enrolled in Vo-Ag during 1974-75 approximates the number of 1975 Vo-Ag graduates from the schools; except for Utah State University which reported over a 100 percent increase of juniors majoring in Vo-Ag.

Table 22

Responses to University Survey Items 5 and 6:
"How many Vo-Ag teacher graduates do you anticipate for 1975?"
and "How many juniors are currently enrolled as Vo-Ag
teaching majors?"

Item	Washington State University	University of Idaho	Oregon State University	Utah State University
Vo-Ag teacher graduates for 1975	26	11	18	8
Juniors enrolled as Vo-Ag teaching majors during 1974-75	24	12	19	17

Table 23 shows that the identified regional states all had unfilled Vo-Ag teaching positions for the 1974-75 school year. But, in all cases the number was four or fewer.

Table 23

Responses to University Survey Item 8: "How many unfilled Vo-Ag teaching positions were there (to your knowledge) in your state's secondary schools in 1974-75?"

	Washington State University	University of Idaho	Oregon State University	Utah State University
Number	3	1	3	4

Table 24 shows the number of Vo-Ag graduates who found teaching positions in Washington. Only the University of Idaho reported supplying Washington with Vo-Ag teachers and the data indicate that such practice may be declining or at least it is not extensive.

Table 24

Responses to University Survey Item 3: "How many of your Vo-Ag graduates found teaching positions in Washington for each of the following years?"

Year	Washington State University	University of Idaho	Oregon State University	Utah State University
1974	23	3	0	0
1973	21	1	0	0
1972	15	0	0	0
1971	15	3	0	0

Summary

As was discussed in the section on teacher demand, the investigators used the 1974-75 Vo-Ag teacher count as a baseline for computing future supply and demand forecasts. The following formula may be used to compute future supply and demand:

$$N = \underbrace{(A + E_1 + E_2 + U)}_{\text{demand}} - \underbrace{(G + V)}_{\text{supply}}$$

where:

N = 1975-76 Vo-Ag teacher need

A = Attrition of Vo-Ag teachers (Table 16)

E_1 = Expansions of Vo-Ag programs which will cause a demand for Vo-Ag teachers (Table 10)

E_2 = Expansions in Vo-Ag programs caused from schools implementing new programs (Table 7)

U = Unfilled Vo-Ag positions from previous years (Table 23)

G = Number of Washington State University Vo-Ag teaching graduates (Table 22)

V = Vo-Ag teachers available from Vo-Ag program reductions in the high schools or those returning to teaching (Table 10)

therefore:

$$N = (10 + 18 + 8 + 3) - (26 + 10)$$

$$N = 3$$

The data taken from the identified tables indicate that Washington will be three Vo-Ag teachers short of supplying the demand for 1975-76. However, as indicated throughout this report, the numbers are not absolute and are subject to variance. An explanation of how the numbers in the formula may change will follow, then forecasts for the 1976-77 school year will be presented using the same formula and logic. A detailed explanation of the 1976-77 school year will not be provided.

Note: Not considered in the formula is a reduction in class size factor. Table 2 shows that the average class size has increased by three students between 1970 and 1973. A more sophisticated formula might incorporate that variable. We did not since there were too many unknowns in the variable to make it meaningful.

Supply

The first consideration for the 1975-76 Vo-Ag teacher supply and demand figures is that 34 of the state's 220 Vo-Ag teachers in 1974-75 held specially issued teaching certificates. Such "special" certificates are not permanent types. Teachers holding temporary certificates may have them renewed on a yearly and individual needs basis. The researchers had no way of predicting the number of renewals that would be granted; therefore, a greater shortage than three Vo-Ag teachers could occur in 1975 if some of the special certificates are not renewed. The extent of full-time teaching by these 34 persons was not determined. But, it may be assumed that if 34 completely trained and certified teachers were available, the number of such special certificates might decline.

The numbers for the "G" variable (the number of 1975 Washington State University Vo-Ag teaching graduates) were taken from Table 22. The number (26) includes students who worked through their B.S. degree to a higher degree or fifth year. Only WSU graduates were considered because the data for institutions of higher education indicated that for recent years out-of-state Vo-Ag teachers migrating to Washington are not common.

The value for the "V" variable (the number of Vo-Ag teachers available from Vo-Ag program reductions in high schools) was taken from

Table 10. The value of "V" (10) is considered a supply of Vo-Ag teachers because those teachers will not be teaching Vo-Ag. However, there is the possibility that some of the Vo-Ag teachers involved might not be willing to move to other schools where Vo-Ag teacher shortages occur. Table 13 indicated why schools were reducing their Vo-Ag programs. If the reduction is a temporary one (e.g., levy failure), the value of "V" may not actually be a supply, but for the purpose of this study it was considered as such. It is possible that schools with a Vo-Ag teacher shortage could recruit a Vo-Ag teacher who will be teaching other subjects in the following year.

There is one other source of supply that was not computed in the formula. It is possible that experienced Vo-Ag teachers who left teaching in previous years or who were teaching in other states might return to teaching in Washington. There is no way of knowing if there will be any such Vo-Ag teachers, but it is considered a source of supply.

Demand

The value of "A" (the attrition of Vo-Ag teachers) is taken from Table 16. Besides the 10 Vo-Ag teachers who definitely need replacement, it was reported that 4 other Vo-Ag teachers were considering leaving. Such speculation could not be accounted for in the formula, but again the possibility exists. Also we could use the average turnover rate of the state to compute "A". There is some teacher loss during the first five critical years of teaching. In 1972 the overall average teacher turnover rate in Washington was 11.7 percent--the lowest rate in 10 years. (Turnover rate is not a loss rate.) But as is shown in Table 10, 4.6 percent of the Vo-Ag teachers in 1975 left their jobs. This

loss rate is probably much lower than the loss rate for the entire state teaching corps.

The value for "E_1" (the number of Vo-Ag teachers needed for Vo-Ag program expansions) was taken from Table 10. From the high school survey data it was observed that two schools planned to utilize Vo-Ag teachers already on staff for program expansions. Therefore, the 18 new Vo-Ag teachers needed probably ought to be 16. The latter figure was not used in the formula since the demand factor will be filled, in part, by presently employed staff. Again, we did not attempt to compute the numbers who might be needed to reduce class sizes.

The value for "E_2" (the number of Vo-Ag teachers needed for the implementation of new Vo-Ag programs) was taken from Table 7. The 8 schools that indicated they were planning to implement a Vo-Ag program in 1975-76 should be accurate. However, 37 other schools indicated they did not know if or when a Vo-Ag program would be implemented.

The "U" variable (unfilled Vo-Ag positions from the previous year) taken from Table 23 is not subject to change for computing the demand for 1975-76. It was reported that three positions were not filled during the 1974-75 school year.

The researchers have computed a shortage of three Vo-Ag teachers for the 1975-76 school year; however, the reader is invited to extrapolate with the other values provided in the formula explanation. Such values may range from an extreme shortage to no shortage at all. If there were a moderate teacher loss during the first five years of teaching, then the number could easily be ten Vo-Ag teachers. (This figure would assume a 12 percent loss per year for the 0-4 year teaching group, or eight teachers per year.) But one must be cautioned that teacher turnover is not equal

to teacher loss. Some mobile Vo-Ag teachers will teach in other districts and not be lost to Vo-Ag.

A demographic consideration. There is one additional element which seems to indicate that the demand factors of our study and formula are conservative and perhaps somewhat low. Observe Table 14 which presents the age distribution for Vo-Ag teachers in 1974 showing that 66 percent are 39 years or younger. The state of Washington's entire teacher corps exhibits a slightly different age profile with 53 percent being 39 years or younger (see Fig. 1). These data may be interpreted to show that Vo-Ag teachers are a somewhat younger group and that they appear to have a rather high attrition rate over age 40. If the latter conclusion is valid, then it would appear that four or five additional Vo-Ag teachers might be needed each year to compensate for this factor alone. Since we did not establish a longitudinal examination of the age data, no conclusive statement may be made. Yet, age 40 seems critical to this particular segment of Washington's teacher corps. When the age factor is added to those previously discussed the demand for Vo-Ag teachers might approach 52 to 54 Vo-Ag teachers per year, but with a supply of about 36. Thus, there is a range of from 3 to 18 teachers who might be needed beyond the supply.

Conclusions

From the totality of data collected in this study we conclude that:

1. There is a modest demand for Vo-Ag teachers in the state.
2. The level of demand may exceed supply by a low 3 to an optimum of 10 to a maximum of about 20 Vo-Ag teachers in 1975-76.

3. The supply of Vo-Ag teachers in Washington seems to be established at about 25 per year from Washington State University which is almost equal to demand and might be adequate under current circumstances.

1976-77 Supply and Demand Forecast

Following are the values for the formula to predict the 1976-77 Vo-Ag teacher supply and demand. The values were derived from the same data and logic as was used for the 1975-76 forecast. Attrition rates and levy failures were considered. Vo-Ag program expansion must be carefully considered because with declining high school student enrollments there could also be a saturation limit to Vo-Ag program growth.

$$N = (A + E_1 + E_2 + U) - (G + V)$$
$$N = (14 + 10 + 4 + 3) - (24 + 5)$$
$$N = 3$$

The data above indicate that three Vo-Ag teachers will be needed in 1976-77. That number would be very conservative, being a minimal base. A demand in excess of supply of 12-15 Vo-Ag teachers could be possible.

Closing Statement

We have not discussed any issues related to Vo-Ag program expansion to other institutions in the state. If our predictions are valid, then expansion of Vo-Ag curricula to other institutions might not be cost-effective, i.e., the predicted small numbers could not justify program expansion on the full-time equivalent (FTE) allocation formula used to fund institutional programs. Yet, if Washington State University were to expand the Vo-Ag program only slightly and recruit a few more students, that institution could probably fulfill the state's total Vo-Ag teacher demand.

As with all surveys and reports of current circumstances, the data are simply tentative. We offer this report and our conclusions for further replication so that the validity and stability of the data may be tested.

Need for additional study. We would suggest that a follow-up be conducted to study five factors or variables which we did not examine. These are:

1. The precise status of Vo-Ag teachers holding special certificates: including age, teaching load, academic qualifications, size of school, and percent of time teaching Vo-Ag.

2. The turnover rate of Vo-Ag teachers with emphasis on determining "loss".

3. The impact of course expansion on teacher demand at the full-time basis including the effect of reducing class size where there are apparent overloads.

4. The impact of part-time Vo-Ag teachers on hiring patterns.

5. The institutional capability of Washington State University to expand its current Vo-Ag program so that a minor excess in supply of Vo-Ag teachers could be matriculated.

These factors emerged after our study had been nearly completed or as we analyzed the data. That is the reason the factors were omitted. Such a study should be supported by a state research grant.

By focusing on the above five unanswered factors a rather precise determination of Vo-Ag teacher supply and demand could be calculated for 1976-77 and possibly through 1979.

---

*Final note: As of August 1, there were seven fully certified Vo-Ag majors who had graduated from Washington State University in June 1975 who were still seeking a teaching position. Perhaps our more conservative estimate is the most realistic.

APPENDIX A

CHECK LIST FOR AGRICULTURAL EDUCATION

NAME _____ DATE _____

YEARS OF VO-AG IN HIGH SCHOOL ____ HIGH SCHOOL _____

The course of study leads to the degree of Bachelor of Science in Agricultural Education. Minimum requirements for the Provisional Certificate and for the Vocational Certificate in Agriculture are met through the schedule of studies given below.

NOTE: Courses which are underlined or appropriate substitutes are required for B.S. in Agricultural Education.

Written or Oral English (6 Hrs.) Engl 101-3; 201-3; or Com - 3; or Ag 205-3.

Social Science (7 Hrs.) Psych 101-3; Econ 201-4.

Arts & Humanities (6 Hrs.) Speech 112-3; Humanities elective - 3.

Mathematics - Math 101 Competence

Biological Science (8 Hrs.) Bio S 103-4; 104-4.

Physical Science (8 Hrs.) Chem 101-4; 102-4.

Education (29 Hrs.) Educ 200-2; 300-4; 402-2; 403-3; VTE 340-2; 341-2; 407-12; 440-2. September Experience

Health Education (2 Hrs.) Health Ed 263-264; 480 or 481-2.

The Bachelor of Science Degree in Agricultural Education under any of the following options requires a minimum of 120 semester hours.

*Agricultural Science - A minimum of 45 hours to be selected from one of the following options are required for Vocational Certification:

Production Agriculture - Mechanics			Production Agriculture - Business		
Ag Econ	(3 Hrs.)	340-3	Ag Mech	(6 Hrs.)	201-3, 402-3
Agron	(5 Hrs.)	101-3, 201-2	Agron	(5 Hrs.)	101-3, 201-3
AS	(5 Hrs.)	101-3, 301-2	AS	(5 Hrs.)	101-3, 301-2
Ent	(3 Hrs.)	340-3	Ent	(3 Hrs.)	340-3
Hort	(3 Hrs.)	101-3	Hort	(3 Hrs.)	101-3
Soils	(5 Hrs.)	201-3, 301-2	Soils	(3 Hrs.)	201-3
Ag Mech	(15 Hrs.)	201-3, 402-3	Ag Econ	(3 Hrs.)	201-3
select a minimum of 9 credits from Ag M 203, 210, 211, 313, 321, 331,344			Bus Ad	(3 Hrs.)	210-3
			select a minimum of 9 credits from Ag Econ 350, 351, 370, 490 and/or Bus Ad 201, 301, 310, 325, 350		

Horticulture			Agricultural Resources - Forestry		
Ag Econ	(3 Hrs.)	select 3	Ag Econ	(3 Hrs.)	elect 3
Ag Mech	(6 Hrs.)	201-3, 402-3	Ag Mech	(6 Hrs.)	201-3, 402-3
Agron	(5 Hrs.)	101-3, 201-2	Agron	(5 Hrs.)	101-3, 201-3
AS	(3 Hrs.)	101-3	AS	(3 Hrs.)	101-3
Ent	(3 Hrs.)	340-3	Ent	(3 Hrs.)	340-3
Soils	(5 Hrs.)	201-3, 301-2	Hort	(3 Hrs.)	101-3
Plant P	(3 Hrs.)	329-3	Plant P	(3 Hrs.)	329-3
Hort	(15 Hrs.)	101-3 or 201-3, 251-2	Soils	(5 Hrs.)	201-3, 301-2
select a minimum of 9 credits from Hort 134, 231, 232, 235, 311, 313, 320, 334, 336, or 438			For	(15 Hrs.)	260-3, 303-3
			select at least 9 credits from For 301, 304, 320, 351, 411, 412, or 415		

*The specific course requirement may be substituted upon approval of advisor. NOTE: Agricultural courses with 101 designation may be substituted by courses within that department having higher prefixes.

APPENDIX B

SURVEY OF VOCATIONAL AGRICULTURE
TEACHER SUPPLY AND DEMAND

Sponsored by
The Office of Field Service and Research
College of Education
Washington State University
Pullman, WA 99163

DIRECTIONS

Most items can be answered by placing a check (✓) mark in the blank box ( ). Please respond appropriately where information is requested for other questions.

1. Please indicate your major responsibility by checking only one of the categories below.

   ( ) 1.1 Vocational Agriculture Teacher

   ( ) 1.2 High School Teacher

   ( ) 1.3 Administrator

   ( ) 1.4 Other (please specify) _____

2. How many secondary school students attend your high school (grades 9-12 or 10-12) for 1974-75?

   ( ) 2.1 1000 or more

   ( ) 2.2 750-999

   ( ) 2.3 500-749

   ( ) 2.4 250-499

   ( ) 2.5 249 or less

IF NO VOCATIONAL AGRICULTURE (Vo-Ag) COURSES ARE BEING TAUGHT IN YOUR HIGH SCHOOL, PLEASE CONTINUE BELOW WITH QUESTION 3.

IF THERE ARE VOCATIONAL AGRICULTURE (Vo-Ag) COURSES NOW BEING TAUGHT IN YOUR HIGH SCHOOL, PLEASE GO DIRECTLY TO QUESTION 7.

3. If there are no Vo-Ag courses or programs in your high school, are there plans for your high school to offer a Vo-Ag course or program?

( ) 3.1 Yes

( ) 3.2 No

( ) 3.3 Do not know

4. If a Vo-Ag course or program is planned for your high school, in which year will it start?

( ) 4.1 1975-76 school year

( ) 4.2 1976-77 school year

( ) 4.3 After 1977 school year

( ) 4.4 Do not know

5. & 6. If no Vo-Ag course or program is planned for the immediate future, please rank in order the first and second reasons which best describe why a course or program will not be added. Place a "1" in front of the primary reason. Place a "2" in front of the second most important reason. Please do not rank any other items. Just rank the first and second reasons, only.

_____ 1 Not enough student interest

_____ 2 No certified Vo-Ag teachers

_____ 3 No need for agriculture training in our school

_____ 4 Lack of facilities

(5)(6)
(1)(2) _____ 5 Lack of money

_____ 6 Levy failures

_____ 7 Other subjects considered more important

_____ 8 Other (please specify) _____

_____

If you are not offering any Vo-Ag courses, you have completed your portion of this questionnaire. Please return this questionnaire in the enclosed envelope. Thank you for your cooperation.

Please check only one response for each question, 7 & 8. Please indicate how you perceive the teaching load of Vo-Ag teachers in relation to all other teachers for each of the following scales.

7. ( ) 7.1 The teaching load in Vo-Ag is heavier than for most teachers in the high school.

( ) 7.2 The teaching load in Vo-Ag is about equal to that of most teachers in the high school.

( ) 7.3 The teaching load in Vo-Ag is lighter than for most teachers in the high school.

8. ( ) 8.1 The "conference or preparation" periods for Vo-Ag teachers are greater than for most teachers in the high school.

( ) 8.2 The "conference or preparation" periods for Vo-Ag teachers are about equal to that of most teachers in the high school.

( ) 8.3 The "conference or preparation" periods for Vo-Ag teachers are fewer than those for most teachers in the high school.

Questions 9 & 10 draw a distinction between classes and courses. Agriculture Science is an example of a course. The number of sections of Agriculture Science which are being taught equals the number of classes.

9. Which of the following best compares this year's (1974-75) Vo-Ag <u>classes</u> to next year's (1975-76) planned Vo-Ag <u>classes</u>?

( ) 9.1 Fewer <u>classes</u> will be offered in 1975-76.

( ) 9.2 Same for both years.

( ) 9.3 More <u>classes</u> will be offered in 1975-76.

10. Which of the following best compares this year's (1974-75) Vo-Ag <u>courses</u> to next year's (1975-76) planned Vo-Ag <u>courses</u>?

( ) 10.1 Fewer <u>courses</u> will be offered in 1975-76.

( ) 10.2 Same for both years.

( ) 10.3 More <u>courses</u> will be offered in 1975-76.

11. Next year's (1975-76) Vo-Ag curriculum will cause which of the following to happen to your staffing pattern?

( ) 11.1 No changes in staffing are anticipated.

( ) 11.2 More certified Vo-Ag teacher(s) will be needed (expansion assumed).

( ) 11.3 Certified Vo-Ag teacher(s) will teach other subjects (reduction assumed).

( ) 11.4 Certified Vo-Ag teacher(s) will be transferred to another school (reduction assumed).

( ) 11.5 Other (please specify)_____

_____

12. If you checked 11.2, 11.3, 11.4, or 11.5 in question 11, approximately how many teachers will be involved? Place the number on the appropriate line.

_____ 12.1 (11.2) More certified Vo-Ag teachers will be needed (expansion assumed).

_____ 12.2 (11.3) Certified Vo-Ag teacher(s) will teach other subjects (reduction assumed).

_____ 12.3 (11.4) Certified Vo-Ag teacher(s) will be transferred to another school (reduction assumed).

_____ 12.4 (11.5) Other (please specify) _____

_____

Questions 13, 14, and 15 concern some anticipated changes for 1975-76. You will only have to respond to one of the sets. Below is a quick summary.

13. Respond to number 13 if no change in Vo-Ag classes is anticipated.

14. Respond to number 14 if you anticipate increasing the number of Vo-Ag classes.

15. Respond to number 15 if you anticipate decreasing the number of Vo-Ag classes.

13. If no change in the number of Vo-Ag classes, check only one statement that best describes your reason for the Vo-Ag curriculum plans for next year.

( ) 13.1 We have the proper balance of classes offered at our school.

( ) 13.2 There is not enough student interest to warrant more classes.

( ) 13.3 Not enough certified Vo-Ag teachers to enable a class increase.

( ) 13.4 Vo-Ag Advisory Committee decision.

( ) 13.5 Other (please specify) _____

_____

14. If increasing the number of Vo-Ag classes, check only one statement that best describes your situation.

( ) 14.1 Curriculum officials felt it advisable.

( ) 14.2 Student interest was high.

( ) 14.3 School patrons felt it advisable.

( ) 14.4 Vo-Ag Advisory Committee decision.

( ) 14.5 Other (please specify) _____

_____

15. If decreasing the number of Vo-Ag classes, check only one statement that best describes your situation.

( ) 15.1 Curriculum officials felt it advisable.

( ) 15.2 Student interest was low.

( ) 15.3 School patrons felt it advisable.

( ) 15.4 Vo-Ag teacher leaving the school.

( ) 15.5 Vo-Ag Advisory Committee decision.

( ) 15.6 Other (please specify) _____

_____

16. If Vo-Ag teachers are leaving your school during 1975 for any of the following reasons, please place the number of those leaving on the appropriate line(s).

Number Leaving	Reason for leaving
_____	16.1 Do not know
_____	17.1 Retiring
_____	18.1 Moving to administration
_____	19.1 Moving to Community College
_____	20.1 Teaching in another state
_____	21.1 Switching to farming
_____	22.1 Switching to agri-business
_____	23.1 Switching to non-agriculture business
_____	24.1 Switching to non-agriculture teaching
_____	25.1 Serving in military
_____	26.1 Deceased
_____	27.1 Attending graduate studies
_____	28.1 Other (please specify) _____

_____

Thank you for your cooperation. Please return this instrument in the stamped, self-addressed envelope which is enclosed. If you have any questions concerning this study, kindly contact:

Dr. Donald C. Orlich
Professor of Education
Cleveland Hall
Washington State University
Pullman, WA 99163

NOTE: A report of this survey is to be presented at the annual Washington Vocational Agriculture Teachers Association (WVATA) in Spokane, July 21-25, 1975.

For survey use only ID ___ ___ ___
29 30 31

ACCESSION NUMBER: VT102385

TITLE: OCCUPATIONAL EDUCATION PROGRAM DEVELOPMENT INSTITUTES FOR POST-SECONDARY INSTITUTIONS. PROCEEDINGS FROM WESTERN REGIONAL INSTITUTE, JULY 7-10, 1969, SAN FRANCISCO, CA. AND EASTERN REGIONAL INSTITUTE, AUGUST 11-14, 1969, ATLANTA, GA.

DESCRIPTOR: *POST SECONDARY EDUCATION; *VOCATIONAL EDUCATION; *INSERVICE EDUCATION; *EDUCATIONAL PLANNING; *INSTITUTES (TRAINING PROGRAMS)

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 23P.

ABSTRACT: THIS REPORT IS A COMPILATION OF THE MAJOR PAPERS, REACTOR COMMENTS, AND DISCUSSION GROUP DELIBERATIONS OF THE PROCEEDINGS OF THE OCCUPATIONAL EDUCATION PROGRAM DEVELOPMENT INSTITUTES FOR POST-SECONDARY INSTITUTIONS. THE INSTITUTES WERE DESIGNED TO PROVIDE INSERVICE EDUCATION FOR POLICY MAKERS AND PROGRAM PLANNERS IN POSTSECONDARY OCCUPATIONAL EDUCATION. THE TOPICS OF CONCERN WERE (1) IDENTIFYING NEW AND EMERGING OCCUPATIONS, (2) MASTER PLANNING IN POSTSECONDARY OCCUPATIONAL EDUCATION, AND (3) POSTSECONDARY OCCUPATIONAL EDUCATION STUDENT RECRUITMENT AND SELECTION. THESE TOPICS WERE SELECTED AS A RESULT OF RESPONSES TO A NATIONAL INTEREST SURVEY OF POSTSECONDARY OCCUPATIONAL EDUCATORS DURING SEPTEMBER 1968. PRIOR TO THE INSTITUTES, THE PARTICIPANTS RECEIVED A MAJOR PAPER PERTINENT TO EACH TOPIC. NATIONALLY RECOGNIZED CONSULTANTS REACTED TO THESE PAPERS AT THE INSTITUTES TO PROVIDE THE STIMULUS FOR INTERACTION IN SMALL DISCUSSION GROUPS. (AUTHOR/NJ)

CONTRACT NUMBER: OEG3-7-000158-2037

INSTITUTION NAME: AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES, WASHINGTON, D.C.; OHIO STATE UNIV., COLUMBUS. CENTER FOR VOCATIONAL EDUCATION.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

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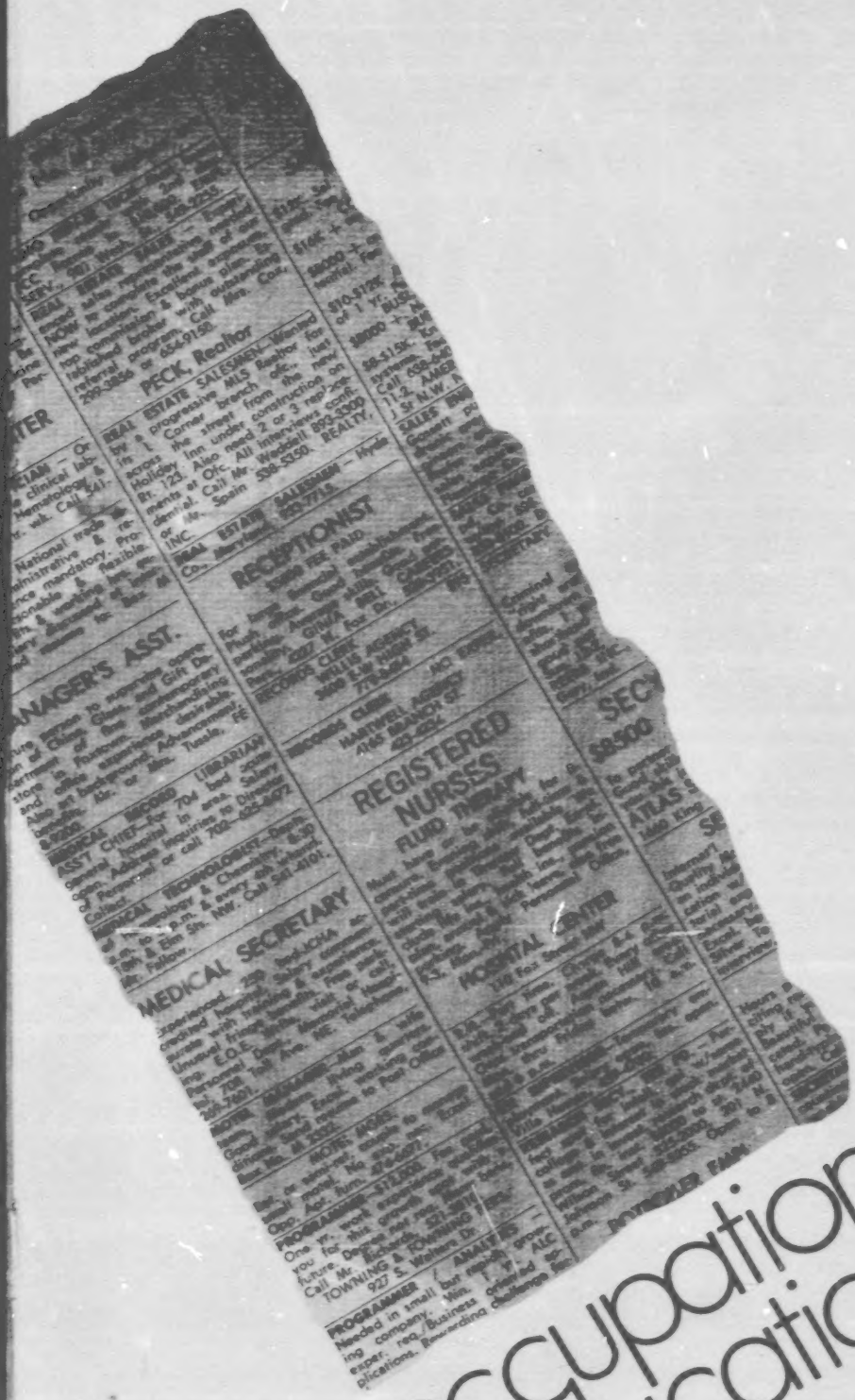

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OCCUPATIONAL EDUCATION PROGRAM DEVELOPMENT INSTITUTES FOR POST-SECONDARY INSTITUTIONS

Proceedings

Western Regional Institute	July 7-10, 1969	San Francisco, California
Eastern Regional Institute	August 11-14, 1969	Atlanta, Georgia

Cooperatively Sponsored By

AMERICAN ASSOCIATION OF JUNIOR COLLEGES
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Washington, D. C. 20036

and

THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION
The Ohio State University, 1900 Kenny Road
Columbus, Ohio 43210

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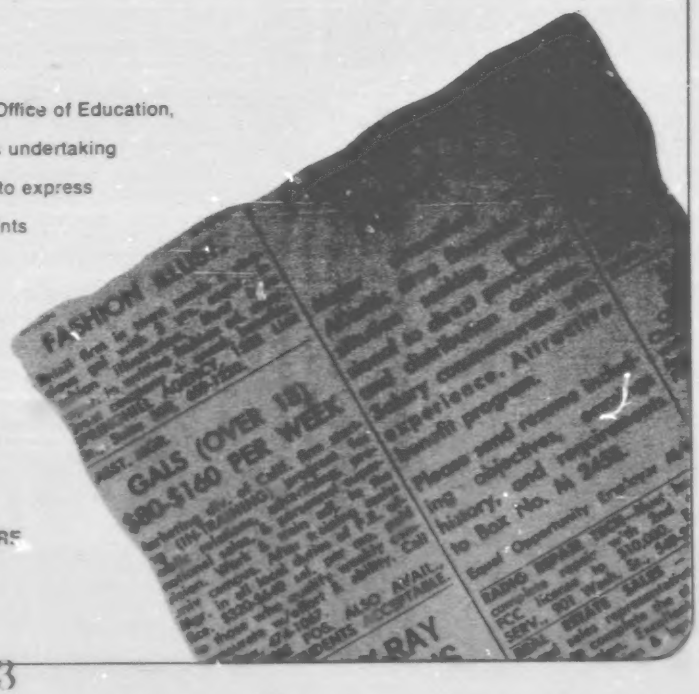

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education Bureau of Research

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PREFACE

The Occupational Education Program Development Institutes for Post-Secondary Institutions were designed to provide in-service education for decision and policy makers and program planners in institutions offering planning programs in post-secondary occupational education. At the institutes the participants were able to: (1) identify the latest developments in occupational education; (2) identify critical problem areas in occupational education; and (3) identify and use principles and resources that might provide solutions to issues and problems facing occupational program administrators. Major topics discussed were:

1. Identifying new and emerging occupations

2. Master planning in post-secondary occupational education

3. Post-secondary occupational education student recruitment and selection.

These topics were selected as a result of responses to a national interest survey of post-secondary occupational educators during September, 1968.

Prior to the institutes, the participants received a major paper pertinent to each topic. Nationally recognized consultants reacted to these papers at the institutes to provide the stimulus for interaction in small discussion groups.

This report is an edited compilation of the major papers, reactor comments, and discussion group deliberations.

MASTER PLANNING IN POST-SECONDARY OCCUPATIONAL EDUCATION

George W. Ebey, *Vice President*
URS Research Company
Palo Alto, California

A chief question facing us as we chart our course for the future is: Will American education blow its opportunities again? Beginning with the Latin grammar school, we reportedly realistic and pragmatic Americans have shunned the relevant in our educational systems. Even Ben Franklin's Academy, designed to provide needed practical knowledge and skills in a new world, succumbed to the onslaught of academic respectability. It became the University of Pennsylvania and many of its contemporaries, such as Andover and Exeter, became distinguished college preparatory schools.

Despite the seven cardinal principles, written during World War I, and *The Purposes of Education in American Democracy* of the Educational Policies Commission, published prior to World War II, the comprehensive high school has never become truly comprehensive. Small wonder that the lay people of America are now turning to still another relatively new institution—the community college—in the search for relevance, in the hope that individual and community educational needs will, at long last, be met.

I'm not sure their hopes are justified, for among us notoriously white-collar, middle-class educators the pressure for academic respectability is indeed great. Certainly in some parts of the United States the community college is little more than a junior transfer institution, waiting with bated breath to join the ranks of Big Brother. When I was a fledgling working for my doctorate, my colleagues and I read with great delight Harold Benjamin's *Saber-tooth Curriculum*, an amusing, strong indictment of irrelevant education. Then all too many of us went out and followed the same pattern—teaching Latin and Greek as a basis for shooting tigers or at least speaking and writing the English language effectively.

We vigorously support the concept that education in our democracy should serve both the individual and society, that it is the essential ingredient for fullest individual self-realization, political freedom, and economic progress. We strongly propose that nothing should stay the most effective development of this system—nothing, that is, unless it requires serious modification of curriculum, organizational structure, geographical areas served, district relationships, personnel policies, or funding arrangements.

There are many who belong to the "don't rock the boat" school. They feel secure in their positions and see change as a threat to that security. They are like the master sergeant in the play *No Time for Sergeants*, who advised the raw recruit from the billy hills: "Look, the Army is like a lake. On it there are many canoes. You're in one canoe. I'm in another. The colonel is in still another. When you start rocking your canoe, it creates waves. These waves rock all the other canoes on the lake. So stop rocking your damned canoe."

I have news for the sergeant and those who think like him. There are already waves. They are likely to get bigger. They have not been created by the rocking of a single canoe. They result from the generally stormy conditions of the environment. It is an environment in which the decision makers have turned to private industry and private agencies, rather than school systems, to meet critical educational needs. The Jobs Corps programs and the National Alliance for Business JOBS programs are cases in point.

It is an environment of accelerating change requiring, more critically than ever before, responsive education and manpower systems, well-qualified personnel, and wise, courageous, and adaptive leadership. In this environment, post-secondary institutions, if they will, can make highly important contributions to American life through their effective planning of occupational education.

To avoid the definition crisis, let us at the outset agree on some definitions—or at least use them whether or not we agree. Occupational education, vocational-technical education, master plan, and post-secondary occupational education are used in this paper as follows:

- *Occupational education* is a program of instruction below the baccalaureate level, including elementary and secondary grades, designed to acquaint persons with and prepare them for the world of work. It encompasses but is not limited to vocational-technical education. Though for reasons related to federal funding and common parlance, occupational education as defined here excludes education leading to a baccalaureate degree, it is apparent that all aspects of education bridging man and his work, including baccalaureate and higher degree programs, logically could be considered parts of an occupational education system.
- *Vocational-technical education* is a program of instruction below the baccalaureate level which provides persons with skills and knowledge for specific employment.
- A *master plan* is an overall framework of guidelines and general planning factors designed to facilitate further planning and development on a systematic and well coordinated basis. Master planning is the process by which the master plan is achieved and revised in the light of new circumstances. In a sense, on the federal level, the recommendations and supporting concepts of the Advisory Council on Vocational Education constitute a master plan. At the other extreme, an architect prepares a master plan for an individual campus and, before he does so, requires educational programing factors on which to base his planning decisions. Thus master planning occurs at various levels and has different dimensions.
- *Post-secondary occupational education* is post-high school occupational education below the baccalaureate level.

The need for master planning at all levels of education is great. Many states need plans for the reorganization of education designed to consolidate and unify elementary and secondary schools; in the coordinating councils for higher education which have developed in recent years; and in the regional planning efforts in higher education, such as those in New England, the Southern region, and the Western states. It is evidenced also in the federally funded regional planning for economic development, in which education and manpower systems are essential ingredients.

But much more remains to be done in educational master planning. In many respects we continue to be victims of our historic past. Because of our basically local beginnings, much variation exists in the organization, support, and adequacy of education within and among states. Inequality is found both in the ghettos of our cities and in the drift of population from rural to urban areas in search of opportunity. State lines, county lines, district lines, which at one point in our history served important purposes, in many instances have become outmoded in terms of the automobile and television, let alone aerospace and computer technology. The need for effective coordination of educational systems within and among states is great indeed.

A concern over ineffective planning was voiced by B. Lamar Johnson, of the junior college leadership program of the University of California at Los Angeles. After a three-month trip visiting community colleges throughout the United States about two years ago, he reported finding community colleges and area vocational schools developing simultaneously and reporting to separate authorities. He indicated that in many instances they appear to be lacking in coordination.

Whether willingly or unwillingly, educators will be required to plan more comprehensively and coordinate their efforts more effectively in the interest of adequacy, economy, and efficiency consistent with quality. This trend is obvious in the state plans now required for federal funding.

The trend is likely to continue, for a chief characteristic of our society in the foreseeable future will be increased concern for social and economic problems by state and federal governments. These problems, accentuated by the growing nucleations of population in metropolitan centers, will relate to health, housing, transportation, pollution, employment, and education as well as other areas pertinent to urban and regional development. With state and federal concern will come additional funding, but the scope of concerns will increase the competition for state and federal dollars.

As funds are requested for capital outlay or operating expenses or both, questions will be asked about goals to be achieved, alternate possibilities for achieving these goals, and evidence of effectiveness of approved plans. Objective evaluation of accomplishments will become standard procedure, with the evaluative design of new programs developed at their inception rather than after the fact. Program budgeting and evaluation will force greater attention to planning on all levels, including master planning and the revision of master plans.

Educators themselves should assume the leadership role in achieving more effective coordination of educational services. The starting point is master planning, not only of post-secondary occupational education, but of the total educational system within a state and, where applicable, among states.

In the master planning of post-secondary occupational education, full consideration should be given to education as a system. A master plan for one segment without consideration of the other segments would be no master plan at all, but an unrelated, compartmentalized structure, like an airport planned without landing strips or land transportation access.

While the precise patterns of education as a system within states and among states will vary, such a system might include: strong unified school districts through grade 12; community college administrative areas blanketing the entire state, with interstate arrangements where service areas cross state lines; colleges and universities, with extension centers, providing baccalaureate and graduate degrees; interinstitutional arrangements for specialized pro-

fessional programs and graduate research; cooperative arrangements with related systems such as public libraries, science and art museums, recreational agencies, and the performing arts; and regional centers for research and development and for continuing education.

Within this total system, the public community college system, properly conceived, has a particularly important role to play because of its tremendous potential in assuring educational opportunity, developing occupational competence, and enriching community life

As a general rule, the diversified, separately organized public community college has potential advantages over other approaches to the provision of post-secondary occupational education: Over private or proprietary colleges because it is relatively low cost to the individual and, therefore, provides greater equality of opportunity; over more specialized schools because it has a broader curriculum, makes possible a richer mix of vocational-technical and general education, and allows the individual to adapt his program more readily in what is for many still an exploratory period. Moreover, in some instances, the diversified approach may be necessary to achieve an institution of sufficient size to be justifiable; over a division within a four-year college because of the latter's typically academic orientation and chief interest in baccalaureate and higher degree programs; over a segment in a unified school district because of the concern of such a district with the many problems of its various other segments.

Though the public community college system appears to have many advantages, in the master planning for post-secondary occupational education other approaches should not be overlooked. Under some circumstances, another approach may be a more effective one. A competent football coach will adapt his system to the resources he has available. In the final analysis the effectiveness of the system will depend upon the players. No public community college, however lofty its stated objectives, is likely to provide an effective occupational education program unless its chief administrator and his staff are fully committed to an education for employment system.

Within the total educational system, occupational education also must be construed as a system. It is a system which should begin in the elementary school with orientation to the world of work and phase through industrial arts and prevocational education to more specific vocational-technical education at the upper high school and community college levels. The central thrust of the 1968 Advisory Council on Vocational Education was toward such a unified system of occupational education. Within this occupational education system, the public community college also has a critically important role. Fourteen years of free public education is likely to become the rule rather than the exception. It has been proposed not only by the Advisory Council on Vocational Education but also by the National Commission on Technology, Automation, and Economic Progress. In the long term, postponement of specific vocational education until the post-secondary years will continue to constitute a strong trend.

Then, as now, any community college worthy of its name will also be an area vocational school developing marketable skills in a broad spectrum of occupational fields. In this role the community college must be interested not only in the quality of its own educational offerings but also in the orientation to employment, prevocational education, and counseling and guidance provided in preceding grades, so that the post-secondary offerings will be part of a well-articulated occupational education continuum. The community college must be a chief protagonist for the upside-down college curriculum, which enables a qualified student to develop marketable skills in the lower division and subsequently to work for a college degree with little or no loss of credit.

Typically, a public community college will be part of a statewide system of post-secondary occupational education. This relationship could be of substantial value in enriching occupational education offerings among the colleges through provision for low enrollment vocational-technical programs in one or more but not all colleges. In states where applicable, such a statewide system would also encompass proprietary schools, private junior colleges with occupational programs, nonbaccalaureate technical institutes, and vocational-technical education programs administered by four-year colleges and universities.

Thus post-secondary occupational education is a system within systems and is likely to achieve its fullest potential only through careful master planning.

Common sense, as well as research findings, clearly indicates that small colleges are more costly per student than larger institutions, that small colleges cannot provide the diversified offerings of larger institutions, that educational deprivation exists not only in our urban ghettos because of an inadequate philosophy of what our schools should do but also in sparsely settled areas because of lack of imagination and archaic practices with respect to service areas. The more specialized the program, the larger the service area population required to maintain the program on an economically feasible basis. An institution may have different service areas for different programs, as in the case of an interdistrict arrangement for a vocational-technical program offered by one or more but not all colleges.

In the master planning of post-secondary occupational education, it is suggested that comprehensive community colleges be planned to serve enrollments of no fewer than 1,000 day students and preferably 3,500 or more students. Community colleges are typically commuter institutions; for this reason it is further suggested that maximum service areas be no more than a radius of thirty to forty miles from the attendance center or, depending upon driving conditions, no more than forty-five minutes' to an hour's drive one way. This stipulation does not preclude the possibility of residential facilities to serve students outside commuter range.

Many community colleges in the United States have total enrollments of fewer than 1,000 students. A high proportion of them have fewer than 600 students. It is apparent that the levels of service in such institutions cannot be very broad, that it would be difficult for them to offer much post-secondary occupational education and virtually impossible for some of them to qualify as area vocational schools under the provisions of federal law.

The further growth of such institutions as separate colleges should be discouraged. A chief danger to the development of community colleges is a rash of small colleges which cannot offer substantial vocational-technical programs, which become staffed with academically oriented personnel, and which resist (like many of our nation's high schools) the development of balanced offerings, or levels of service. Because occupational education is a critical ingredient in a community college, a vocationally-oriented school or college normally would be a much better starting point for a community college than would an academic institution.

Discouraging the growth of small colleges does not imply discrimination against sparsely settled areas. It does mean that more systematic, coordinated, innovative planning will be required. In areas which do not have sufficient population for a college but which can provide community college enrollments of 300 or more full-time-equivalent day students, the community college center idea appears to have merit. Such a center or centers could be affiliated with a community college as part of the same community college administrative area. This administrative area could even cross state lines, a logical arrangement where parts of two or more states form a natural socioeconomic area.

Master planning occurs at various levels and has different dimensions, as indicated earlier. The closer one is to the operational level, the more specific he may become in his master planning. Like all legitimate planning, master planning should be goal oriented and action based. In simplest terms, the master planning process requires people, a research orientation, organization, and funds. Hopefully, the people will have initiative, imagination, resourcefulness, planning skill, and time for planning.

With respect to the master plan itself, the following elements should be included:

1. Goals or objectives—The Advisory Council on Vocational Education has stated: "Some formal post-secondary education for all should be a goal for the near future." And one might add, "Related to the immediate and long-term needs and interests of the individual and responsive to current and future manpower requirements."

2. The geographical boundaries of the master plan—such as a region, a state, or an administrative area within a state.

3. A time frame—preferably looking into the future as far as the eye can see, and a set of assumptions regarding what might occur in that time frame. For post-secondary education, one should be able to plan in general terms eighteen years into the future, for the entering freshmen already have been born.

4. Demographic and environmental data essential to program planning—such as student population forecasts, labor force projections, emerging manpower requirements, and the impact of technology upon occupational education needs.

5. Programs and resources essential to meet long-range and short-term needs—including the occupational resources of the community.

6. An action plan—with guidelines, general planning factors, priorities, and time lines relating to program and facility development, organization and organizational relationships, staffing, and funding.

7. A plan for updating the master plan—based upon experience and changing circumstances.

In master plans for post-secondary occupational education, great variations will exist among the states and regions because circumstances differ. There are, however, general characteristics which should be applicable to all plans. These characteristics might be used for judging a present system, as well as serving as a basis for periodic evaluation and possible modification of a master plan as it is implemented. The following general criteria are suggested as guidelines. The post-secondary occupational education system should:

1. Have clearly defined goals and a current plan of action for achieving them

2. Be responsibe to individual needs and interests and to current and future manpower requirements

3. Afford learners pertinent, readily accessible counseling, guidance, and employment services

4. Provide for equality of educational opportunity in specific, readily measurable terms, not only through scholarships and loans, but also through transportation and subsistence allowances and in some instances paying students to go to school

5. Be effectively coordinated and well financed

6. Be realistically innovative and creative—responsive to changed methods and procedures, and willing to experiment to improve levels and quality of service

7. Seek positive solutions to problems and avoid the inhibitions imposed by the persistence of outmoded practice

8. Use occupational resources fully for work experience and employment, for the purpose of making education relevant, and for furnishing exploratory opportunities to learners

9. Coordinate its efforts with and provide support to other systems and institutions with compatible objectives

10. Be staffed with well-qualified personnel aware of occupational needs, and particularly with imaginative, resourceful, and courageous leadership fully committed to an education for employment system

11. Assure effective two-way communication both internally for students and various staff levels and externally between educational personnel and the people of the area served

12. Emphasize quality of service but at the same time encourage economy and efficiency consistent with quality

13. Provide for systematic and continuous evaluation through gathering objective information pertinent to goals.

All too frequently these general criteria are not met for a variety of reasons—not the least of which are the people responsible for planning and implementing plans, ineffective organization, and funding.

Vocational-technical education has been defined as education for specific employment. However, in a changing technological society, a post-secondary institution cannot offer much that is specific beyond entry level skills. Moreover, the employment itself often is in a much better position to provide specific training opportunities than a community college or other post-secondary institution. It is important that in these institutions emphasis be placed not only upon entry-level skills but also upon attitudes, habits, and skills that have general application, so that the individual is able to adapt readily as he moves vertically to higher-level positions or horizontally as manpower requirements shift.

Post-secondary occupational education should be looked upon as a partnership between the community college (and its counterparts) and the employment world, with the college assuming the function of developing an individual for initial employment, assisting him in finding employment, and providing him with continuing education as he seeks to upgrade himself in his chosen occupational field. This concept rejects the idea that the A.A. degree should be the immediate or even the ultimate educational objective for all. It connotes a career-ladder pattern of education, an upside-down curriculum for some in the community college, flexible scheduling, occupational programs of short-term duration, part-time employment/part-time education opportunities, and a counseling program that extends over a long period of time for an individual. It also connotes an educational program which is relevant and motivating to the individual.

Throughout this paper, it has been stated and implied that the key concerns in master planning of post-secondary occupational education are, first, the needs and interests of individuals and, second, the manpower requirements of society. These are not mutually exclusive, discrete categories. The opportunities in the world of work are relevant to the individual, and society prospers best when its potential labor force is fully employed, competent, and highly motivated. These two factors and other elements in the planning process are identified below. The purpose of the master planning process is the design of a viable master plan which can be adapted in the light of new knowledge and changing circumstances. The elements in the process are:

1. A forecast of student populations likely to be enrolled in post-secondary occupational education during the master-planning time frame—with as much pertinent demographic data relating to them as possible, such as number, sex, socioeconomic background, persistence in school, and county of residence

2. A projection of manpower requirements during the master-planning time frame, with national, state, and, to the extent possible, area future manpower requirements. Ideally these projections should be both by industry and by significant occupational category

3. An inventory of current manpower, to serve as a starting point for evaluating future manpower needs

4. A survey of current post-secondary education and training programs and related resources, such as institutions, students enrolled, enrollment by occupational program, teachers, teacher-education programs, facilities, and sources of funding

5. A projection of the post-secondary occupational education and training programs and related resources needed to meet future manpower requirements.

6. An evaluation of the alternative methods by which these programs and related resources might be provided, with full consideration for program quality, flexibility, and cost

7. Development of an approved post-secondary occupational education and training master plan to meet forecast student populations (and to the degree possible, their interests and needs) and projected manpower requirements, including resources to implement the plan and a priority schedule

8. Establishment and conduct of demonstration and experimental projects, with evaluation feedback into the master plan.

An inseparable relationship should occur between effective planning and action-oriented research: Analysis, projections, alternative plans, and evaluations lead to a flexible educational master plan which may be modified on the basis of further experimentation and evaluation.

In the projection of manpower requirements, the information should be presented in such a way that it can readily be translated into education and training programs with respect to (1) level of education, so that post-secondary occupational education requirements can be identified, and (2) content of the education and training, e.g., registered nurse, electronics technician.

Master planning is a function which requires experience, judgment, and objectivity. It can be accomplished by an in-house staff with the time for and competence in planning, by outside sources on a contractual basis, or by a combination of the two. Regardless of the course of action chosen, full advantage should be taken of available authoritative information. The concern over education for employment has been with us for many years, and excellent sources of data exist, though the data often require adaptation to the new purpose. Good starting points would be the American Association of Junior Colleges, with its leadership capability in occupational education; the Center for Vocational and Technical Education at Ohio State University, with its significant resources, including the national ERIC facility for occupational education; and the

junior college leadership program at the University of California at Los Angeles, with its strong interest in occupational education and its junior college ERIC facility.

A high degree of sophistication in data collection exists at the federal level and at some state levels. Excellent usable information frequently can be obtained from the U.S. Department of Commerce, the U.S. Department of Labor, and the National Center for Educational Statistics of the U.S. Office of Education. On the state level, pertinent data normally are available from the state planning organizations and from the departments of education, employment or employment security, labor or industrial relations, and commerce and economic development, as well as agencies interested in special fields such as health. In many states, universities provide technical assistance to business, industry, and community planners and will have relevant information for master planning post-secondary occupational education.

Among other possible sources are professional and trade associations, chambers of commerce, state coordinating councils for higher education, and other organizations active in the field such as the New England Regional Board of Higher Education, the Southern Regional Education Board, the Center for Southern Education Studies at George Peabody College for Teachers, the Public Affairs Research Council of Louisiana, and the Western Interstate Commission on Higher Education.

On local levels exploration should be made of the organizations likely to require objective data for their planning efforts, such as county offices of education, industrial development commissions, and utility companies. In some instances a major bank will have a research department active in the collection and development of demographic and economic data.

No realistic master plans will develop, nor will the best of plans be implemented, without effective leadership. This leadership should come from both the education profession and from other groups. All too frequently the other groups become more excited over education for employment than do those in the education profession per se. From the viewpoint of master planning an effective program of occupational education, excellent state leadership is crucial. In addition to its normal planning activities, every state should develop a statewide master plan for post-secondary occupational education and should encourage the appropriate political subdivisions to prepare related and more detailed master plans for the future. It is further suggested that educational leadership in states with common boundaries explore the possibilities of interstate planning.

Whether master planning is for the regional, state, or local level, involvement of appropriate local educational leaders is extremely important. They provide grass roots realism to the planning.

At the outset the question was posed: Will American education blow its opportunities again? I am convinced that, though systems of formal education may, American education broadly defined will not. The need for relevant education for employment is too great, and the people of our nation too ingenious not to face reality and provide for it. Functions may be shifted to private enterprise or, on federal and state levels, to other agencies less reverent of academic respectability than traditional offices of education. Or still other forms of institutions may emerge in our already fragmented total educational system. But the needs will be met.

I have great hopes for the community college, which with resourceful, innovative, and courageous leadership and proper financing, has great potential. But I am not sure these hopes will be realized. The smell of ivy is in the air.

CONSULTANT REACTIONS

Charles A. Bucner, Education Director
Division of College Transfer Programs
Department of Community Colleges
State Board of Education
Raleigh, North Carolina

Gerald B. James, President
Rockingham College
Wentworth, North Carolina

Jimmie C. Styles, Vice-President
Research and Development
Tarrant County Junior College District
Fort Worth, Texas

. . . I am sure that most of us will agree that in the past many of our educational institutions have shunned the relevant in our educational systems. It does appear that the community college is our best hope for meeting the individual and community educational needs; that is, if these institutions are able to resist the pressure for academic respectability.

. . . We should begin by examining some present views of what a community college ought to be. Our models come to us from a period of history when higher education was meant to prepare young men for lives of creative leisure. That was the chief aim of the liberal arts. Now it is claimed that the chief value of the liberal arts lies in the humanizing effects that they have upon those who pursue them. Whatever they may be, liberal arts are not specifically occupational in orientation, unless one wishes to become an instructor of the arts.

. . . It might be well for community college educators to seek answers to the following questions. Is the role to emphasize humanities or occupational training? If it is both, how can two rather divergent goals be achieved through the same curriculum? What per cent of the curriculum should be humanistic? What per cent should be specifically occupational? On the basis of the questions that have been posed one can readily see how this confusion affects us in the community colleges: We have accepted the responsibility of providing the first two years of college parallel work for those who intend to achieve a baccalaureate degree; at the same time we have also accepted the responsibility to provide for those who wish terminal training in the technical or vocational areas. We have recognized the fact that it is more difficult to recruit students for many of the occupational programs than it is for the college parallel programs. We would also have to admit that the transition from industrial education center and technical institute status to community college status has not always been as smooth as we had hoped it would be, and time is required before the transition can be called a success or a failure.

. . . The period of 1943 to the present represents development of the community college concept in the junior college movement. The drop in regular enrollments and the need for training defense workers during World War II stimulated junior colleges to open their doors to the community, especially during the evening. The result was a new appreciation of the public junior college by the local population and an increased willingness to support it as a locally controlled institution. Many of the community colleges during this period lacked the comprehensiveness of our present day multipurpose institutions.

. . . Those of us who have been associated with the community college movement for a number of years might wish to pose this question. Why wasn't the master planning concept stressed during the early development of state systems of community colleges? There may be several answers to this question. One is that we may have been so busy counting our new institutions, increased enrollments, and developing stop-gap procedures that we neglected to do

the necessary long-range planning. Federal acts such as the Vocational Act of 1963, the Appalachian Act and others may have provided the stimulus for the development of state and regional master plans. As an example our state department recently developed a master plan for the 23 two-year institutions in the North Carolina coastal region. This plan covers a period of ten or more years.

. . . We have looked critically at the major universities and Land Grant colleges as they have limited enrollments to the top 5 per cent of the population. Yet, we have seen a new system of community colleges arise which may be merely taking the next 7-10 per cent. What about the other 85 per cent of the population? Herein lie the masses of our citizens. They are our greatest hope for raising level of living, increasing per capita income, and improving citizenship in general. We say we live in a democracy based upon an educated citizenship and a participating citizenship. Perhaps we are for those whose educational needs are for a beautifully packaged two-year program transferable to a four-year college, or from which one enters employment, and for those whose educational needs are prepackaged in a one-year bundle. But what about those whose needs are for one course, three courses, six weeks, three months, or other less popular-sized packages? And what about those who don't appear on registration day because they haven't been tuned in to our channel of information spreading, either for social, economic, or educational reasons?

. . . In a section dealing with basic factors in master planning, Ebey included service area, which deals with the geographical boundaries from which clientele come. He suggested that comprehensive community colleges be planned to serve enrollments of no fewer than 1,000 day students and probably 3,500 or more total enrollees; coming from a 30 to 40 mile radius or a 45 to 60 minutes traveling time. He was quick to state that this does not rule out dormitories. However, the addition of dormitories increases the cost sharply, making further education prohibitive to many areas. Most community colleges in the United States have total enrollments of fewer than 1,000. Many, especially those in less populous areas, will not be able to excel 1,000 unless they shift to dormitories, or, as I suggested earlier, we really seek to serve the community of educational needs of the citizens of the geographical community—the 85 per cent—not just a select few whose educational needs fit the predetermined package we have developed because we like it, because it is easy to package, or because we traditionally have packaged it in a certain way.

. . . Ebey suggested that one approach to securing adequate enrollment in sparsely settled areas is the development of community college centers, or extension units of the central campus. He suggested emphasis on occupational education at the post-high school and adult levels in such centers. North Carolina followed this approach; in 1966 we had approximately 20 centers in operation. Some colleges had no extension centers, while others had several. We thought it was a good idea and thought it was working well, but we, through our own professional agency, the Southern Association of Colleges and Schools, struck a death blow to the centers. The accrediting agency, in essence, told the parent institutions that they could not be accredited until they severed ties with the centers. What would you have done? Probably the same thing the institutions in North Carolina did: they severed ties with the centers. Obviously, the accrediting agency had fear that courses taught in the centers without adequate libraries, in some cases with inadequately prepared faculty, and with inadequate supporting personnel and facilities would not measure up to the standards of the main campus. I am not being critical of Mr. Ebey's idea of centers, but rather indicating that there are many problems inherent in the implementation of the idea, including the problems of meeting the educational needs of citizens and at the same time maintaining acceptable standards. At this point, if time allowed, I would be critical of the Southern Association of Colleges and Schools for their arbitrary attitude, and would be critical of a number of institutions in North Carolina for backing away from the educational needs of many citizens. At the risk of appearing cynical, I would say that I hope we will be more concerned with meeting the educational needs of our citizens than concerned with whether it is college level. I am also concerned that our focal point be on educational needs of our citizens than on accreditation.

. . . For years educational institutions have been accused of being theoretical rather than practical. From our past experiences in occupational education, we are well aware that the theoretical concepts promulgated from an institution are to be used as a basis for departure—a foundation on which practical application may be built. The burdens of today created by the trials of yesterday often prevent each of us from planning for tomorrow. However, we must bear in mind, we are training tomorrow's leaders. This makes it a necessity to include educational experiences which will meet the personal needs of the students as consumers and citizens. Along with this, we must build in courses of a technical nature to equip those students who desire jobs in our businesses and industry.

. . . Education for tomorrow's leadership is of such importance that local opportunism—the causes of wasteful competition and rivalry between institutions should be nonexistent. If a genuine attempt is made to bring all educational agencies together, I am sure they will find that after proper identification of area needs, the job which needs to be done is one which requires more financial resources and allocation of personnel than is available.

. . . While the development of a master plan can be a traumatic experience, the implementation of this plan is a monumental task. Some of the things which must be accomplished are:

1. Buildings must be planned and constructed. Equipment must be purchased. Along with the best of the traditional, the most promising of the new must be provided. Educational television, computer-assisted instruc-

tion, team teaching, and programmed instruction all have places in the planning of occupational education.

2. A faculty must be selected with each member being highly competent in his field, skilled in teaching ability, and actively subscribing to occupational education philosophy.

3. The faculty and staff must be organized into a smooth-functioning, efficient team dedicated to the purposes of the programs and to striving for excellence.

4. The financial resources of occupational education must be budgeted to provide for the current needs and permit healthy growth in the future.

5. An educational climate must be created in which students and faculty may receive the greatest benefit from the investment of money, time, space, and human resources.

Once the above are attained, it is necessary to involve all staff members in planning.

. . . One very important aspect of master planning is site selection and the factors to be considered in determining what is needed. The determination of needs should include: enrollment, educational programs, location, accessibility, and size of site. The purpose of master planning is to ascertain future needs. Therefore, the acquisition of properties in advance of need is very important. The anticipation of needed occupational programs and their location make thorough analysis a must.

. . . Dr. Ebey's example of aspirations while in a doctoral program and implementation after entering the world of work is conclusive evidence that higher education as initially conceived and historically implemented is not designed to meet the needs of occupationally oriented students. A more realistic approach to the promotion of education for work may be a partial solution to this problem. There is more needed than philosophical lip service. Lip service without positive action will create many more problems in our society than can be solved.

. . . The actual needs of a community can be quite different from those envisioned by educators who hold to the concept that occupational education must fit into the educational mold handed down through the years. Until occupational programs are recognized as important and the urgency is felt throughout education, these programs will experience difficulty.

. . . Vocational-technical education master planning is and will be an essential element in determining the eventual success of occupational training in general. Such planning has not yet become an accepted concern nor assumed responsibility of most administrators in this area of education. In spite of the problems which are hindering occupational educational planning on a local level or broader dimension, it is agreed that the vocational-technical type administrators must find a way to take the initiative and make master planning a reality. Otherwise, they will be faced with the consequences of being subordinate to those who will do master planning and who might not look favorably on occupational education concerns.

IDENTIFYING NEW AND EMERGING OCCUPATIONS

Dr. Norman C. Harris
Professor of Technical Education
Center for the Study of Higher Education
The University of Michigan
Ann Arbor, Michigan

In confining the discussion to new and emerging occupations, there is no implication that all of the present meat-and-potatoes occupations are going to disappear. Despite a gradual evolution in the occupational structure and the appearance of many new jobs unknown in the 1960's, the end of the next decade will find us with a work force whose structure will not be surprisingly different from that of today. We will still need toolmakers, welders, secretaries, assembly line workers, cosmetologists, cooks, gardeners, and mechanics, as well as needing hundreds of thousands of new workers in the new and emerging jobs to be discussed in the sections to follow.

Though the decade ahead will bring shifts in the occupational structure, the changing demands within each job family will not be cataclysmic in the sense that they will render millions of workers obsolete. New demands will appear gradually enough that on-the-job training will provide the "mobility" most older workers need and new programs of education and training can be instituted in two-year colleges on a schedule which will prepare youth for the new careers of the 1970's and beyond. Formal retraining programs in community colleges, technical institutes, and adult schools will assist those whose jobs do, in fact, become victims of technological change.

In identifying new and emerging occupations, a sampling approach in several fields of endeavor will be adopted. The following categories will serve as centers of discussion:

1. Occupations in agriculture and natural resources development
2. Occupations in business fields
3. Occupations in health and human services
4. Occupations in industry
5. Occupations related to science and engineering.

Agriculture and natural resources: In the United States the trend toward mechanization and corporate farming will undoubtedly continue. Not only are large scale mechanized operations more efficient, but current drives to bring farm laborers into collective bargaining agreements and to bring about a guaranteed annual wage for farm workers will inexorably force out the small farmer and encourage further mechanization of corporate farms. Consequently the total number of jobs in agricultural production will continue to decline, and the new jobs as might develop will have their basis in agricultural science research, soils research, plant pathology, hybridization, harvest methods research, agricultural logistics, and hydroponics; and in the design, sale, and maintenance of agricultural equipment and machinery.

Some of the jobs with these new emphases are already quite common, coming under such headings as agribusiness and agriculture technology. The new jobs which may emerge will be for the most part at midmanagement and technician levels, and they will require training programs with strong theoretical inputs from science, engineering, economics, and business. A few job titles which may be well recognized by 1980 include: hydroponics farm manager, agricultural methods analyst, plant pathology technician, and veterinary technician. And, certain emerging occupations like soils technician, urban horticulture technician, and ag-chem technician will continue to grow.

The important problems of ecology and natural resources development are already beginning to demand persons with special training at middle manpower levels. Game and fish management, forestry, conservation, recreation, oceanography, and meteorology are all fields in which technical-level jobs have been identified within the past decade. New and emerging jobs for which technician training will be required during the 1970's may include: forestry aide, wildlife management assistant, ecological research technician, hydrographic technician, mariculture technician, and desalinization plant technician. One of the critical manpower problems inhibiting the rapid develop-

ment of the marine sciences is a shortage of competent technicians, and of post-secondary educational programs to train them.

Business occupations: It is probable that the field of business enterprise will not generate a large number of new kinds of jobs unheard of a decade ago, but that persons in existing jobs will, year by year, have to acquire new knowledge and skills to cope with the increasing complexities of the business world. For example, the future cashless society will require many workers with new skills and knowledge, but present job titles such as machine accountant, data-phone operator, data processing technician, credit analyst, and computer programmer will probably be used to describe these workers. Similarly, the new paths to decision making in business opened up by computer and communications networks, will require thousands of middle-management workers with new competencies, but it is doubtful that new job titles will be assigned. Many communications and telemetry technicians will be needed, thousands of well-trained two-year college graduates in finance, insurance, and real estate fields will find ready employment, and secretaries combining increased levels of general education with a mastery of developing office technology will be in great demand for the foreseeable future. As business becomes more international in scope the inputs to decision making become more difficult to control and their sources are more diffuse; communication across cultural and linguistic barriers is uncertain, and geopolitics becomes a problem. Professional and managerial personnel in business, as business becomes more complex, will face the same kind of manpower squeeze that confronted scientists and engineers two decades ago, and they will need vastly increased numbers of middle-level workers, technicians, to gather the data, man the communications systems, operate the computers, prepare graphical analyses, write the technical reports, arrange for travel and conferences and yes, run the offices. But it is not likely that a great number of new job titles will emerge, or that brand new curriculums will be necessary in large numbers. The new knowledge and new skills required will be incorporated within courses and curriculum which, for the most part, already exist in a thousand colleges from coast to coast.

Health and human services: During the 1950's and the first half of the 1960's, the engineering and industry-related technologies grew at an astonishing rate, but as the 1960 decade draws near its end, the spotlight of rapid growth is shifting to technologies related to health and human services. By comparison, estimates of the ratio of technical level personnel to professionals in engineering and industry run from 1:1 to 3:1, depending on the field and on the estimator; whereas the actual ratio in health, medicine, and dentistry is now nearly 6:1, and manpower experts in the field assert that it should be 12:1.

More than thirty allied health technologies have been identified ranging from audiometer operator to X-ray technician. Emerging occupations, that is those already identified and developing but for which educational programs are still not fully stabilized include such job titles as: inhalation therapist, electro-encephalograph technician, medical assistant, medical illustrator, community health aide, pediatric assistant, unit manager, and mental health aide. Some of these jobs are as yet not fully accepted by hospitals and physicians; and some of them, though accepted, are still in the process of evaluation with the boundary conditions of the job still poorly defined. Collegiate-technical programs to prepare persons for these jobs are, as might be imagined, diverse in concept and content, with little standardization from one state to another.

The nature of some new health technologies for the 1970's can perhaps be inferred from the titles of the featured papers presented at a recent national conference on Biomedical Technology and Manpower held at Grossmont College, El Cajon, California, in April 1969. The papers bore these titles:

"Systems Approach to Medical Technology"

"Potential Impact of Solid State Circuits on Medical Electronics"

"Biomedical Computers, Automatic Instruments, and What One Needs To Know To Operate and Maintain Them"

"Technician's Inventory of Knowledge as a Design Outline"

"Operation and Maintenance of Recording Apparatus for Vital Body Functions"

"Designer's and Manufacturer's View of Capabilities of the Biomedical Technician."

Though health manpower needs for the entire decade cannot be clearly identified at this point in time, these hypotheses will probably stand a ten-year test:

1. The need for nurses, medical lab technicians, dental assistants, and others in established health technologies will continue unabated.

2. There may emerge a rather significant need for service-level health workers who can render effective service in the home, and in community centers, rest homes, and retirement homes.

3. The new health occupations will, for the most part, require persons with college-level education and training in the biological sciences, the physical sciences, and in these sciences combined with engineering technology.

Occupations in human service: These occupations are at present in an embryonic state of development. There is little question about the need for such workers as society becomes more complex and as urbanization increases. Also, and this might be considered a fortuitous circumstance, some of the occupations in human services fields are not substantively so academically rigorous that students of average and lower academic ability are automatically ruled out. However, there are some very knotty problems centering around such matters as the career aspects of such jobs, the income to be expected, the status of these jobs in the hierarchy of occupations, and the kind and level of education and training to be offered. Significant inputs

from the social sciences and the behavioral sciences seem essential, as is the development of certain essential skills peculiar to the programs for law enforcement officers, firemen, library assistants, and recreation aides. Other related careers which will be important by the mid-70's are teacher aide, socialworker aide, public housing management assistant, traffic specialist, urban planning technician, pollution control technician, environmental health assistant, and community child care center assistant.

Occupations in industry: The needs of industry for workers with postsecondary education and training run the gamut from semiskilled and skilled trade and craft workers to the quasiprofessional engineering and science and technicians whose education and training is job oriented. The section following will treat the semiprofessional and paraprofessional, field-oriented technicians.

Industry could mechanize and automate much faster than it actually does. Labor organization pressures, government full-employment policies; and to some extent, a developing social conscience within industry itself, inhibits rapid technological advance, increased automation, and consequent severe employment cut-backs. Industry and business, by and large, have adopted the policy of automating at a rate no faster than the number of retirements, deaths, and quits.

In all probability there will not be many, if indeed any, new jobs at manual skill levels in industry. Industrial workers will still extract, haul, shape, assemble, finish, test, and package, using the materials and machines of industry, energized mostly by electrical power. Jobs will necessitate new skills from time to time as materials change (e.g., working with plastics, exotic metals, radioactive materials) but these are skill increments rather easily acquired either on the job or from brief periods of formal in-plant or evening school training.

Occupations related to science and engineering: The jobs that are being created by the advance to technology are for the most part at semiprofessional levels in occupations which require knowledge and specialized skills associated with the physical, biological, and engineering sciences. The need for semiprofessional technicians is critical in these fields. The following table presents estimates of present needs in selected fields, as taken from that publication.

Keeping in mind that the estimates reported were for 1966, and that the trend is toward increased need for science- and engineering-based technicians, the critical nature of the problem for the middle- and late-1970's comes into sharp focus.

The engineering technologies are not new or emerging. They have been around for nearly three decades and have been represented by tested and proven educational programs in technical institutes and junior colleges for most of that time period. There is little doubt that the engineering technician will continue to occupy an important spot in the middle-manpower spectrum through the 1970's and beyond. Joining him in the 1970's, however, will be a significant number of technicians in new and emerging occupations with even greater emphasis on science-based knowledge and with inputs of knowledge from two or more disci-lines. The following job titles, some new, some emerging, may become commonplace by the mid-1970's.

TECHNICIANS NEEDED NOW IN SELECTED SCIENTIFIC AND ENGINEERING FIELDS

Types of Technicians	Number Needed
Biomedical hospital equipment	50,000
Electromechanical	100,000
Electronic computer service	20,000
Communications and telemetry	10,000
Computerized drafting	5,000
Numerical control (machine tool)	10,000
Chemical manufacturing process control	5,000
Agricultural production and service	75,000
Pollution control	10,000
Total	285,000

Aerospace technician
Air traffic control technician
Bio-chemical technician
Bio-engineering technician
Bio-medical technician
Computer network communications technician
Conservation technician
Crystallography technician
Earth sciences technician
Environmental control technician
Genetics technician
Laser technician
Marine sciences technician
Meteorological technician
Nuclear propulsion technician
Oceanographic technician
Physics aide
Orbiting satellite systems technician
Science data processing technician
Solid state physics technician
Wildlife management technician

Such a list could be extended to double or triple the length of the above, but the job titles listed are typical of those already emerging and being predicted for the next decade.

Need, however, is only one parameter of the manpower problem. Recruitment of students, planning curriculum content, and securing a competent instructional staff are all equally important dimensions of middle-manpower development, and it is to these and related matters that we turn in the concluding section.

Dealing in futures, whether in the commodity market or in the social and behavioral sciences, is an uncertain business. Within the context of predictions about society's future, the foregoing discussion has attempted to suggest some new and emerging occupations which may be of direct concern to postsecondary education in the decade of the 1970's. Lest there be some misunderstanding, it is reiterated here that many, perhaps most, of the middle-manpower jobs of today will persist into and through the next decade. Machinists, auto mechanics, secretaries, electronics technicians, nurses, policemen, and computer programmers are not going out of style.

Target-setting approaches to manpower development are intended to influence the future course of development rather than to try to predict accurately what the manpower situation will be at a given future time.

For the 1970's it could be said that the need index will be relatively great in the health and human services occupations; in the natural resources-ecology-environment field; and in the science/engineering technology field. There are two other indices, however, which affect the degree of realism of a target-setting approach—an ability index, and a prestige index. Ability index is related to the academic and manipulative capabilities of the students who will attend community colleges and technical schools; and prestige index has to do with whether or not a given occupational field has drawing power, image, or attraction for large numbers of students. A few examples can serve to illustrate the dilemmas which will frequently confront curriculum planners during the decade:

1. *The service occupations*—The need index will be very high; the ability index about medium (depending on the particular job field); and the prestige index (at present) is very low.

2. *Natural resources, ecology, environment*—The need index will be substantial; the ability index above that possessed by the majority of two-year college students; and the image index, although low at present, may be elevated by the mid-70's.

3. *Health and human services*—The need index will be very high; ability index medium, depending on speciality; prestige index is high for health occupations, low (at present) for human services.

4. *Science/engineering technologies*—Need index will be high; ability index will be above that which is characteristic of two-year college students; prestige index high.

The crux of the student recruitment problem can be summarized as follows: The occupations with a high need index tend to have either a high ability index or a low prestige index. Or, put another way: students who are matched to the ability index of an occupation generally regard that occupation as having low prestige, even when the need is great.

The deans of 1975 may find faculty recruitment somewhat less of a problem than it has been during the 60's. For one thing the rate of increase in post-secondary enrollments will not be as great as it has been in this decade. Further, greatly increased numbers of new college graduates will be available in the early 1970's and with teachers' salaries now reasonably comparable to entry salaries in other professions, the teacher shortage may disappear in all but a few highly specialized fields. Even this year, it is reported that there may be an over-supply of teachers, and it is possible that such perennially short fields as physics, biology, engineering, and mathematics may move off the critical list in another year or two.

Persons with highly specialized practical experience in the various middle-manpower occupational fields will, of course, always be hard to recruit. Where, for example does one find instructors for a marine sciences program? Or for bio-engineering technology? Or for laser technology?

Curriculum planning will present all the usual problems along with some new ones yet undiscovered. Inherent in the predictions of this paper are the following suggestions for curriculum planners:

1. The new and emerging occupations will be for the most part, at semiprofessional and technical levels rather than at trade and craft levels. A number of the paraprofessional fields will develop four-year curriculums leading to a bachelor's degree, as engineering technology and medical laboratory technology have already done.

2. Most of the new programs will require generous inputs from one or more of the following fields of knowledge: The physical sciences, the biological sciences, the social sciences, and the behavioral sciences.

3. Since many of the new occupations involve human service, the communication of information, and teamwork with professionals, more attention will have to be given to general education.

4. Since enrollments in advanced specialty courses will probably be low (for several years at least), consideration should be given to both of the following: clustering of the programs with a common freshman core for the cluster; and regional planning which results in high cost, low enrollment courses being placed in selected institutions with the core courses being offered in many institutions. With such a scheme, for example, a student could take the major part of a health technology core at his local junior college or technical school, and transfer to the nearest regional institution offering the sophomore work for the operating room technician curriculum.

Two highly important matters deserve mention in closing. Without a satisfactory solution to conflicting and diffuse patterns in both of the following, junior colleges and technical schools will find it difficult to exert any significant force on the new manpower problems of the 1970's.

1. The lack of secondary school programs planned and operated specifically to prepare high school graduates for entry into associate degree, technician-level programs in junior colleges and technical schools. Specifically, this means that high schools must give more attention to the average student. He must come out of high school with better English skills, with mathematics at least through

elementary algebra and geometry; and with a physical science or a biological science (or both) taught with laboratory at his level of understanding. (All too many tailor these courses so that they "fit" only the top 15 or 20 per cent of students. The future technicians are not prepared for collegiate-technical studies on graduation from high school.)

2. The rules, regulations, and prescriptions which govern the allocation of federal vocational education funds in most states. Rooted in fifty years of tradition, oriented toward secondary education, and still hung up on the less-than-college-grade syndrome, many state plans for vocational education make it extremely difficult if not impossible to operate collegiate-technical level programs for new and emerging occupations and have them approved for federal vocational funds.

At best we see the future "through a glass darkly." At worst there is no image at all, merely an unilluminated void. These thoughts have been intended to focus the glass. It is your task to light up the void.

CONSULTANT REACTIONS

Louis F. Batmale, Vice - President
City College of San Francisco
San Francisco, California

Moses S. Koch, President
Essex Community College
Baltimore, Maryland

George Mehallis, Technical Director
Vocational and Semiprofessional Studies
Miami-Dade Junior College
Miami, Florida

. . . Professor Harris' sampling approach to the identification of new and emerging occupations is most appropriate to this discussion. In making his prediction of our capabilities to do the job required in the 70's, he applies three indices—the first of these is need. I have already related as to its prediction. The other two indices are ability, as it pertains to capacity to succeed in selected programs and prestige as related to drawing power or attraction of students. I would urge some caution in the application of both of these, particularly as they apply to the urban areas. The traditional ability measures are becoming increasingly suspect when applied to minority groups. Admittedly no better predictive tool has been developed, but perhaps they can be by-passed in favor of more effective instructional strategies. The greater use of tutors, teacher aides and early compensatory programs are being tried with some promise. The prestige factor is by no means immutable. Our assignment of greater prestige to science/engineering technology is another of our professional hang-ups. It may be the result from our persistent nostalgia to be identified as collegiate.

. . . The cautious, if not pessimistic, predictions of the author are understandable. I would share his outlook if I thought that we were to continue to travel the same route that we have followed.

. . . Reference is made to four-year curriculums leading to the Bachelor of Technology. This development is a most significant one. Raising the top rung of the technical or paraprofessional level beyond grade fourteen will not only aid our recruitment but will enable us to better prepare middleman power for increasingly complex technologies and more sensitive supervisory responsibilities. Our thinking has been for too long circumscribed by the two years of education responsibility allotted to us. Not only must we look ahead to continuing education through Grades 15 and 16, but we must also look back to at least Grades 11 and 12 as part of the same continuum of occupational ladder.

. . . The suggestion that secondary school programs be planned and operated to prepare high school graduates for entry into junior college occupational programs is most palatable. The concept is not a new one, for there were among those who pioneered the community college movement, some who advocated the 6-4-4 system of school organization. In their writings, you will find strong arguments for the occupational continuum Grades 11-14.

. . . Sometimes geography and/or socio-economic factors are causes for the relative failure of career programs in not attracting students. For example, despite the help of a five-year grant from HUD, a program at Essex Community College to train city planners and urban renewal workers has attracted relatively few students in five years. From the outset the administrators were aware of certain conditions militating against its success, e.g. an anti-urban renewal climate in the county and the absence of any sizeable ghetto. For this reason we brought an inner city community college into the program on a consortium basis. Yet in neither of the two colleges has the program been, quantitatively speaking, very successful. Among the discernable reasons for this are: lack of student interest; lack of faculty support for career programs which do not demon-

strate prompt quantitative success, and the geographic and socioeconomic factor. I submit that if the community college is to fulfill an active aggressive role as an agent of social change these so-called mistakes must continue to occur.

. . . Community colleges need to increase public exposure, knowledge and awareness of certain fields and occupations. If people generally don't know what city planning is, how can we expect their children to seek a career in it? One reason why we find relatively large enrollments in law enforcement curriculums is that everyone at least knows what a policeman is and does, although their concept may not be entirely correct. This can be done—although not without difficulty—by cracking into the elementary and secondary school curriculums, not with boring occupational content such as a unit in the 9th grade, on "What shall I become?" but with economics, sociology, and political science creatively and relevantly injected into the public school curriculums, far earlier than normally considered—in place of Pizzaro, Cortez and Montezuma, in place of the history of Maryland, and in place of the abstruse values of "the annual rainfall in our county . ."

. . . The junior college should conceive of education as a continuous process and even begin militating for it by: (1) possibly mandatory free education to age 18, (2) continuous, i.e., periodic re-education throughout life, (3) subsidized re-education for those over 50.

. . . Relative to the disappointments of the decade in this respect I would differ with Professor Harris, contending that community colleges and technical schools have had no impact on developmental and basic education whatsoever. They have not as yet begun to address themselves to what portends to be a crucial problem in the 80's. The only fresh wind is the observation that educators at all levels are more favorably inclined toward occupational education than at any time in our recent history.

. . . The shortage of teachers in the vocational-technical areas is critical. Some of this might be caused by the questionable contingency that a college degree is necessary if one is to teach in the occupational areas. It was suggested that a criterion of competency rather than academic degree be considered in acquiring teaching personnel.

. . . Finally, the use of personalized programs might be a more realistic approach to occupational training. Students who do not require as much training time to become skilled should not be confined to rigid schedules. Such personalized treatments should carry throughout all post-high vocational-technical institutions.

STUDENT RECRUITMENT AND SELECTION FOR POST-SECONDARY OCCUPATIONAL EDUCATION PROGRAMS

Robert M. Knoebel, *Assistant Director*
Bureau of Community Colleges
Commonwealth of Pennsylvania
Harrisburg, Pennsylvania

Educators and employers are becoming aware of the importance of preparing individuals for entrance into many occupations at the post-secondary level. Therefore, increased attention should be given to the recruitment and selection of those who are interested and can profit by enrolling in such programs.

Our rapidly developing technological society has created major social and economic problems not only for our nation but on a worldwide basis. There are large numbers of unemployed and underemployed individuals while at the same time many unfilled work opportunities exist. Substantiation of this fact is readily evident when one examines the help-wanted pages of our newspapers and magazines.

One of the major problems in meeting manpower needs is the recruitment of students for nonbaccalaureate, post-secondary occupational education programs. A serious status-image inhibiting recruitment results from our society placing excessive emphasis on the significance of the baccalaureate degree. This and other problems effecting occupational education should be examined. The challenge then is to devise and apply solutions. The problems herein listed are not intended to be all inclusive but are intended to be indicative of areas creating difficulties.

In an age that places great emphasis on the acquisition of a baccalaureate degree, the status of an individual having less is considered by many as insignificant. The result is difficulty in recruiting individuals for those occupational education programs not designed as part of a baccalaureate degree curriculum. No simple answer exists to this problem, but we must strive unceasingly to solve it. It might be highly desirable to provide everyone with a baccalaureate degree at birth and then proceed with realistic education!

Another major obstacle to the recruitment of students for post-secondary occupational education programs is the inadequacy of guidance and counseling services in elementary, junior, and senior high schools. In too many instances such services are provided in a narrow fashion designed primarily for baccalaureate degree candidates and at a "too late" date. How can the guidance and counseling services be strengthened at all levels?

Providing citizens with complete, factual information relative to occupational education is an important, difficult task. Only as such information is provided in a thorough manner will individuals be encouraged to pursue those programs designed to help satisfy the manpower needs of our nation. The question in need of an answer is "How can appropriate information regarding manpower demands, and opportunities for preparing to meet those needs, be disseminated in an effective manner?"

The strong technological and economic advances in our nation have been accompanied by such problems as urban and rural poverty, school dropouts, racial inequalities, and educationally disadvantaged populations. How to recruit persons for postsecondary occupational programs from these groups presents many perplexing problems. How do we reach such individuals? We must find ways and means to serve this population if the welfare of our society is to be strengthened and a strong economy is to be maintained.

It seems very evident that if our socioeconomic problems are going to be met, postsecondary occupational programs must be available on an open-door policy. How can essential remedial and developmental needs be met by an institution operating with an "open-door" policy? How can quality programs be maintained when such a policy is used?

Organizations can be used to spread word about rewards for successful occupational workers. A good example of this potential was recently illustrated by the Connecticut

Chemical Manufacturing Association. While facilities for educating chemical technicians were very good, inadequate numbers of students were being enrolled in the programs. The association, in cooperation with educators, put into effect a program to inform the public of both the need and the rewards for persons employed in this occupation. What resulted were increased enrollments in chemical technology curriculums. However, it was soon evident that successful recruiting required an ongoing publicity program rather than a one-shot effort.

The range of agencies and organizations that stand ready to provide service similar to the Connecticut Chemical Manufacturers Association is almost unlimited.

Cooperative education programs and part-time work opportunities are an effective technique for recruitment. It is a difficult program to provide in an effective manner. However, those responsible for postsecondary occupational education should extend themselves to assure full utilization of cooperative education. It seems only natural that persons with average or above-average capabilities are the ones preferred for occupational education programs, particularly when openings are limited and applicants exceed the number of work stations. Institutions providing occupational education must develop ways and means for "including in" rather than "selecting out" the wide range of individuals having need for preparation for entrance into employment and for those employed who need upgrading and updating.

We can no longer ignore those who may have limited capabilities, those who may have been denied opportunities, or those who have failed to achieve maximum educational development in kindergarten through high school years. With these comments, let us review some of the problems relating to the selection of students.

Our real concern centers on how we can effectively assist individuals having a wide range of characteristics to select the program that is within their capabilities and then help them to progress where they can take their places as contributing members of our society.

No effort will be made to identify the many prepared, purchasable tests available for those interested in a formal examination device. The use of such tests relating to interest, mechanical aptitude, visualization, comprehension, reading, and mathematics will undoubtedly provide certain data about the individual. However, they frequently fail to measure important characteristics such as determination, maturity, and concern for success. As leaders in the field of occupational education, we need to weigh carefully the strengths and weaknesses of formal testing devices, using them with a full understanding of their shortcomings. Interpretations of such tests must be made only in the very broadest sense.

An approach frequently followed involves the use of supplemental information gathered from application forms and by supplementary data from agencies, institutions, or organizations having had contact with the applicant. A personal interview is frequently a part of this technique. This procedure, though helpful, also may have definite weaknesses in that very little objective information becomes available. Miscellaneous data is reviewable, a visual picture of the applicant is obtained, and an understanding of the expressed interest of the individual is acquired.

Some of the more successful schools have used a simple application form with an elementary mathematics test. The short formal test is followed by an oral interview to determine interest. On the basis of expressed interest and achievement, chiefly on the elementary test, applicants are assigned to the program of their choice for orientation and tryout. The courses are structured to allow four to ten weeks for careful instructor-observation of student interest and progress. As the student progresses, the instructor carefully evaluates his success in the program. If the student progresses satisfactorily, he or she will be permitted to proceed with succeeding units until completion. When it is apparent the program is inappropriate for the individual on the basis of interest and/or achievement, the person, following appropriate counseling, may be transferred to another program where he begins another orientation period. Conceivably this procedure could be repeated a number of times until the proper niche is found for the student.

Some will say this type of selection is a waste of time and is too difficult to administer. A program of this nature requires maximum flexibility plus better than normal counseling services. The flexibility essential for such programs involves the use of educational technology, at least to supplement and strengthen instructional procedures. Furthermore, a procedure of this nature makes an open-door policy possible; the end result will be the preparation of individuals for employment to the maximum extent possible in keeping with their interest and abilities.

Does the tryout procedure appear to have merit? If so, how can greater encouragement be given to the selection and assignment of applicants on the basis of expressed interest followed by orientation and/or tryout periods? What type of organization of skills and knowledge is required for such a program? How can the content be programmed? To what extent should the program be self pacing?

There is every evidence that greater and greater attention will be given to postsecondary occupational education at federal, state, and local levels.

Included among the challenges ahead is the task of coordinating and articulating occupational education programs between the secondary and postsecondary institutions. Planning at the state and local level is also extremely important.

The demands for postsecondary occupational education are tremendous. What can you do to assist with the improvement and strengthening of recruitment and selection of students for post-secondary occupational education? You determine the answer!

CONSULTANT REACTIONS

Kenneth A. Brunner, Professor of Education
University of Missouri
Columbia, Missouri

Frank L. Juszli, President
Norwalk State Technical College
Norwalk, Connecticut

Alfred M. Phillips, Vice-Chancellor
Dallas County Junior College District
Dallas, Texas

. . . I would like to make one suggestion in answer to Knoebel's quest for a more adequate public information program about occupational programs. When preparing information for the public, try to concentrate more on the broad curriculum groupings, such as health services, engineering technology, and mid-management training.

. . . Although Knoebel expresses a real concern about matching students to programs, I think we should try it another way. Instead of selecting programs within the capabilities of the students, techniques, and materials should be developed to build on student strengths, skills, and attitudes. This will call for some breaking of an educational lockstep, for we often unintentionally force students into existing programs.

. . . Many experiments have shown that general IQ tests, general aptitude tests, and broad-base college entrance examinations correlate poorly with success in occupational programs. More singular tests such as those which seek out mathematics skills or science knowledge or social responsibility appear to be more readily useful for occupational education students.

. . . One of the most effective selling points for occupational career programs is to get right down to potential earnings of the successful graduate of a skills program. This calls for counseling personnel who know the facts and who can sell programs. Once sold on the occupational field, the student needs counselor help in realistic program selection which fits his interests and abilities.

. . . One matter, which has not been mentioned, is the effect a quality teacher has upon recruitment, selection, and retention. A teacher with a good reputation among practitioners in the field, plus interest in students and a natural ability to teach, is absolutely vital to a quality program. In my opinion, whether or not a teacher in an occupational field has a collegiate degree is unimportant, as long as he possesses the technical and teaching skills to do the job."

In order to have viable programs in recruitment and selection in occupational career fields we must believe that quality is measured by the success of properly placed students in a program. Program quality should not be measured in terms of sophistication.

. . . As educators we should not have to recruit, *but instead, inform the public in what they might choose. We should* not have to select *but, rather guide the public along occupational routes in which there is a mutual compatibility between job availability and personnel supply.*

ACCESSION NUMBER: VT102386

TITLE: INFORMATION ABOUT EPDA, PART F, NATIONAL PROJECTS FOR 1974-75.

DESCRIPTOR: VOCATIONAL DIRECTORS; *EDUCATIONAL PROGRAMS; VOCATIONAL EDUCATION TEACHERS; *PROGRAM DESCRIPTIONS; PROGRAM DEVELOPMENT; *INSERVICE TEACHER EDUCATION; ADMINISTRATOR EDUCATION; CAREER EDUCATION; *NATIONAL PROGRAMS; FEDERAL AID

IDENTIFIER: EDUCATION PROFESSIONS DEVELOPMENT ACT; EPDA

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 33P.

ABSTRACT: THIS BROCHURE LISTS, BY REGION, NATIONALLY FUNDED VOCATIONAL EDUCATION PROJECTS IN PROFESSIONAL DEVELOPMENT FOR 1974-75. INCLUDED ARE BRIEF DESCRIPTIONS OF PROJECT ACTIVITIES, SUCH AS WORKSHOPS, SEMINARS, CONFERENCES, AND TRAINING PROGRAMS. (NJ)

INSTITUTION NAME: NORTH CAROLINA STATE UNIV., RALEIGH. CENTER FOR OCCUPATIONAL EDUCATION.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

VT 102386

INFORMATION ABOUT EPDA, PART F, NATIONAL PROJECTS FOR 1974-75

BROCHURE COMPLIMENTS OF

center for occupational education

SCHOOL OF EDUCATION
NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

VT 102 386

INFORMATION ABOUT EPDA, PART F, NATIONAL PROJECTS FOR 1974-75

Foreword

The activities described in this brochure have been made possible through grants administered by the U. S. Department of Health, Education, and Welfare, Office of Education. Dr. T. H. Bell is the Commissioner of Education, and Dr. Virginia Y. Trotter is the Assistant Secretary of DHEW for Education.

These education professional development activities are under the auspices of the Bureau of Occupational and Adult Education, Dr. William F. Pierce, Deputy Commissioner, and the Division of Educational Systems Development, Dr. T. William Carter, Director. The Chief of the Vocational Education Personnel Development Staff is Dr. Duane M. Nielsen, and the responsibility for overall direction and coordination of the Section 553, Part F, projects and programs is assigned to Ms. Muriel Shay Tapman. The project directors of the national projects are listed elsewhere in this brochure.

This brochure has been prepared and disseminated as an activity of the National Project on Coordination of State Vocational Education Personnel Development Systems of the Center for Occupational Education, North Carolina State University at Raleigh. Dr. John K. Coster is the project director, and Mr. Vaden B. Hairr is project monitor. Dr. John Lovegrove, Senior Program Officer, Region IV, BOAE/USOE, Atlanta, Georgia, is project officer. The brochure material was prepared by Mrs. Carolyn F. Williams.

No person will, on grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under these projects.

Distributed by the
CENTER FOR OCCUPATIONAL EDUCATION
North Carolina State University at Raleigh

VT 102386

NATIONAL EPDA, PART F, PROJECTS

1974-75

Region I

TITLE OF PROJECT: A Study of State Administrative Staffing Patterns and Delivery Systems of Vocational Education and Their Relative Effectiveness

Dr. Richard Whinfield, Project Director

Dr. Harry Hartley, Project Co-Director

Sidney Cohen, Connecticut Personnel Development Coordinator

Walter Bialobrzeski, Connecticut State Director for Vocational Education

Walter Verney, Regional Project Officer

Region II

TITLE OF PROJECT: The Establishment of a Comprehensive Adult and Vocational Education Department at the College of Education of the University of Puerto Rico

Vidal Velez, Project Director and Puerto Rico Personnel Development Coordinator

Jose Lema Moya, Puerto Rico Director for Vocational Education

John W. Stahl, Regional Project Officer

Region III

TITLE OF PROJECT: Professional Development Workshop for Directors of Vocational Education in Large Cities

Ms. Josie Cole, Project Director and D. C. Personnel Development Coordinator

Dr. Vincent Reed, D. C. Director for Vocational Education

Ms. Lucy Campbell, Regional Project Officer

Region IV

TITLE OF PROJECT: National Project for Coordination of State Vocational Professional Personnel Development Systems

Dr. John K. Coster, Project Director

Vaden Hairr, North Carolina Personnel Development Coordinator

Dr. Charles Law, North Carolina State Director for Vocational Education

Dr. John Lovegrove, Regional Project Officer

Region V

TITLE OF PROJECT: National Leadership Development Programs for Vocational Education Personnel

Dr. Dan Koble, Project Director

Robert Koon, Ohio Personnel Development Coordinator

Dr. Byrl Shoemaker, Ohio State Director for Vocational Education

Daryl E. Nichols, Regional Project Officer

TITLE OF PROJECT: National Project of Section 552, EPDA

Dr. Gordon I. Swanson, Project Director

John Van Ast, Minnesota Personnel Development Coordinator

Dr. Robert Van Tries, Minnesota State Director for Vocational Education

Daryl E. Nichols, Regional Project Officer

Region VI

TITLE OF PROJECT: Management by Objectives in Selected State Departments of Vocational and Technical Education

Dr. William Stevenson, Project Director

Arch Alexander, Oklahoma Personnel Development Coordinator

Region VI (continued)

Dr. Francis Tuttle, Oklahoma State Director for Vocational Education

William Cummens, Regional Project Officer

Region VII

TITLE OF PROJECT: The Career Education Personnel Development Consortium Project

Dr. W. A. Rumbaugh, Project Director and Kansas Personnel Development Coordinator

John E. Snyder, Kansas State Director for Vocational Education

Leslie Thompson, Regional Project Officer

Region VIII

TITLE OF PROJECT: A National Demonstration Project for Implementing a Business, Industry, Labor and Education Exchange Program for Vocational Education Personnel

Wayne Boekes, Project Director

Gene A. Sayler, North Dakota Personnel Development Coordinator

Carrol Burchinal, North Dakota State Director for Vocational Education

John Lacey, Regional Project Officer

Region IX

TITLE OF PROJECT: Strategies on High-Level Policy-Making

Dr. Melvin Barlow, Project Director

Dr. James Becket, California Personnel Development Coordinator

Samuel L. Barrett, California State Director for Vocational Education

John W. Bunten, Regional Project Officer

Region X

TITLE OF PROJECT: Greater Involvement of Indian People in Vocational Teacher Education

Archie Breslin, Project Director and Washington State Personnel Development Coordinator

Arthur Binnie, Washington State Director for Vocational Education

Sam Kerr, Regional Project Officer

PROJECT ACTIVITIES

REGION I

WHAT: National Conference on Leadership Through the Understanding of Management Systems

WHEN: June 23-27, 1975

WHERE: University of Connecticut, Storrs Campus

WHY:

1. To provide participants with the understanding and ability to use each of the strategies involved in management systems.
2. To enable participants to establish management strategies in their own settings.
3. To enable participants to identify the use of computers and other tools to achieve an integrated management system.
4. To enable participants to increase their awareness of the philosophical implications of implementing various management strategies.
5. To enable participants to implement evaluation of management strategies.

TARGET PARTICIPANTS OR POPULATION: Approximately 100 participants made up of:

1. Representatives from each state department of education--preferably the professional development coordinators.
2. Teacher educators or decision-making vocational education administrators.
3. Selected university professors responsible for vocational education teacher preparation.
4. U. S. Office of Education personnel.

WHOM TO CONTACT FOR MORE DETAILS:

Dr. Richard Whinfield, Project Director
Department of Higher, Technical and Adult Education
University of Connecticut
Storrs, Connecticut 06268 Telephone: 203/486-4813

REGION II

WHAT: The Establishment of a Comprehensive Adult and Vocational Education Department at the College of Education of the University of Puerto Rico

WHEN: June 30, 1974-December 31, 1975

WHERE: University of Puerto Rico, including Arecibo, Mayaguez and Ponce Centers

WHY:

1. To establish a comprehensive professional development program in vocational and adult education at both the graduate and undergraduate levels at the College of Education of the University of Puerto Rico.

2. To provide a program that would ensure upgrading courses for teachers and other ancillary personnel who need to complete certification requirements for their positions.

3. To provide the opportunity to recruit and train Spanish-speaking personnel for teaching positions in occupational education.

TARGET PARTICIPANTS OR POPULATION: Approximately 600 vocational education teachers enrolled for degree and upgrading courses.

WHOM TO CONTACT FOR MORE DETAILS:

Mr. Jose Lema Moya, State Director
Vocational Education
State Department of Education
Box 818
Hato Rey, Puerto Rico 00900

Telephone: 809/764-2215

REGION III

WHAT: National Professional Development Workshop for Administrators of Vocational-Technical Education Programs in Large Urban Cities

WHEN: November 10-13, 1974

WHERE: Washington, D. C.

WHY:

1. To initiate a forum to improve comprehensive planning for vocational education in the urban areas by determining the components of planning and the solution to planning problems.

2. To develop strategies for vocational education in urban areas to improve local, state and federal support for vocational education activities.

3. To explore the trends and develop new initiatives in career education and/or vocational guidance and exploration.

4. To develop a rationale and vehicles for expanding and improving relationships between vocational education in the urban areas and the state and local governments.

KEY SPEAKERS: Dr. Virginia Trotter
Assistant Secretary
Department of Health, Education and Welfare

Mr. Lowell Burkett
Executive Director
American Vocational Association

Dr. Paul Briggs
Superintendent
Cleveland Public Schools

Dr. Terrell Bell
U. S. Commissioner of Education

Mr. Charles Radcliffe
Minority Counsel
U. S. House Committee on Education and Labor

Dr. John F. Jennings
Majority Counsel
General Sub-Committee on Education

TARGET PARTICIPANTS OR POPULATION: Approximately 140 participants, including:

1. Vocational education directors and other staff from the 50 largest cities in the United States, plus directors from the largest city in each state which may not be represented in the former group.

2. Representatives from groups such as the American Vocational Association, Great Cities Research Council, State Directors of Vocational Education, National Advisory Council on Vocational Education, National Leadership Training Institute on Recruitment, Teacher Education Groups, D. C. Public Schools, and D. C. Advisory Council on Vocational Education.

WHOM TO CONTACT FOR MORE DETAILS:

Ms. Josie Cole, Project Director
Personnel Development Coordinator
State Board for Vocational Education
D. C. Public School System
Washington, D. C. 20004

Telephone: 202/737-5298

REGION III

WHAT: Follow-Up Professional Development Workshop for Administrators of Vocational-Technical Education Programs in Large Urban Cities

WHEN: April, 1975

WHERE: Washington, D. C.

WHY:

1. To continue the forum initiated in the National Workshop.
2. To discuss and explore strategies, trends, and issues brought up in the National Workshop.

TARGET PARTICIPANTS OR POPULATION: Approximately 100 participants, including 85 directors of vocational-technical education in large urban areas and 15 representatives from interested educational groups.

WHOM TO CONTACT FOR MORE DETAILS:

Ms. Josie Cole, Project Director
Personnel Development Coordinator
State Board for Vocational Education
D. C. Public School System
Washington, D. C. 20004

Telephone: 202/737-5298

REGION IV

WHAT: National Conference on "Women in the World of Work"

WHEN: September 29-October 1, 1974

WHERE: Washington, D. C.

WHY:

1. To provide an open forum for discussion of critical issues associated with equal education and employment opportunities for women.

2. To provide factual information and increase knowledge concerning these opportunities.

3. To develop recommendations for improvement of non-stereotyped educational and employment opportunities for both women and men.

4. To develop a program for action for attacking the problems associated with education and employment for women.

KEY SPEAKERS:

Mrs. Gloria T. Johnson
Director, Education and Women's Activities
International Union of Electrical Radio and Machine Workers
Washington, D. C.

Miss Sherrie Mazinzo
Former Award-Winning Writer
Minneapolis Star
Doctoral Fellow, Michigan State University
East Lansing, Michigan

Mrs. Barbara Lett Simmons
At-Large Member, D. C. Board of Education
President, BLS and Associates, Inc.
Washington, D. C.

The Honorable Roman C. Pucinski
Lecturer on Career Education
Alderman, Chicago City Council
Former Congressman
Eleventh Congressional District, Illinois

Dr. Jack Willers, Professor of History and Philosophy of Education
George Peabody College for Teachers
Nashville, Tennessee

Dr. Elizabeth J. Simpson, Chief
Curriculum Development Branch
Division of Research and Development
Bureau of Occupational and Adult Education
U. S. Office of Education
Washington, D. C.

TARGET PARTICIPANTS OR POPULATION: 552 project directors, vocational education personnel development coordinators, vocational education planners, and other leaders in vocational education.

WHOM TO CONTACT FOR MORE DETAILS:

Dr. Mary L. Ellis, Director
Technical Education Research Centers (TERC)
2401 Virginia Avenue, NW
Suite 301
Washington, D. C. 20037

Telephone: 202/331-9590

NOTE: This conference was conducted under a subcontract with the Center for Occupational Education, North Carolina State University at Raleigh.

REGION IV

WHAT: Conference of National 553 Project Directors

WHEN: October 28-29, 1974

WHERE: Washington, D. C.

WHY:

1. To coordinate the activities of the national conference in terms of purpose, time, clientele to be served, and other points of interest.
2. To solicit suggestions for conducting the projects from other participants.
3. To plan a strategy for disseminating the products of the projects.

TARGET PARTICIPANTS OR POPULATION: Approximately 14 participants, including:

1. National 553 project directors.
2. Members of vocational education personnel development staff.
3. Bureau of Occupational and Adult Education staff.

WHOM TO CONTACT FOR MORE DETAILS:

Dr. John K. Coster, Director
Center for Occupational Education
North Carolina State University at Raleigh
P. O. Box 5096
Raleigh, North Carolina 27607

Telephone: 919/737-3127

REGION IV

WHAT: Fourth National Leadership Development Seminar for Vocational Education Personnel Development Coordinators

WHEN: January 22-24, 1975

WHERE: Washington, D. C.

WHY: To provide current information on program materials and management of projects conducted under Section 553, Part F, Education Professions Development Act, to Vocational Education Personnel Development Coordinators of states and trust territories responsible for vocational education professional development programs and to regional DHEW project officers for vocational education professional development.

TARGET PARTICIPANTS OR POPULATION: Approximately 56 Vocational Education Personnel Development Coordinators and 10 Regional Project Officers from the DHEW regions.

WHOM TO CONTACT FOR MORE DETAILS:

Dr. John K. Coster, Director
Center for Occupational Education
North Carolina State University at Raleigh
P. O. Box 5096
Raleigh, North Carolina 27607

Telephone: 919/737-3127

REGION IV

WHAT: National Workshop on Conducting Needs Assessment for Vocational Education Personnel Development Systems

WHEN: April or May, 1975

WHERE: To be determined

WHY: To develop the ability of Vocational Education Personnel Development Coordinators to establish, install, and direct a needs assessment function in the state system for vocational education professional development.

TARGET PARTICIPANTS OR POPULATION: Approximately 56 Vocational Education Personnel Development Coordinators

WHOM TO CONTACT FOR MORE DETAILS:

Dr. John K. Coster, Director
Center for Occupational Education
North Carolina State University at Raleigh
P. O. Box 5096
Raleigh, North Carolina 27607

Telephone: 919/737-3127

REGION V

WHAT: National Conferences of Section 552, Part F, Project Directors and Resource Panel

WHEN AND WHERE: August 1-2, 1974 - Washington, D. C.

December 7, 1974 - New Orleans, Louisiana

(Other sites and dates to be determined)

WHY: To coordinate, through meetings of project directors, the EPDA Fellowship Training Program.

TARGET PARTICIPANTS OR POPULATION:

1. Section 552, Part F, project directors and resource panel members.

2. EPDA state coordinators from states awarding EPDA fellowships.

WHOM TO CONTACT FOR MORE DETAILS:

Dr. Gordon I. Swanson
College of Education
116 Classroom Office Building
University of Minnesota
St. Paul, Minnesota 55108

Telephone: 612/373-5183

REGION V

WHAT: National Leadership and Training Seminar for EPDA Fellowship Awardees

WHEN: December 6, 1974

WHERE: New Orleans, Louisiana

WHY: To provide a forum for EPDA fellows to examine contemporary issues in vocational education.

KEY SPEAKERS: American Vocational Association leaders

TARGET PARTICIPANTS OR POPULATION: EPDA fellows

WHOM TO CONTACT FOR MORE DETAILS:

Dr. Gordon I. Swanson
College of Education
116 Classroom Office Building
University of Minnesota
St. Paul, Minnesota 55108

Telephone: 612/373-5183

REGION V

WHAT: AVA Pre-Session Research Training Program

WHEN: December 4-6, 1974

WHERE: New Orleans, Louisiana

WHY: The program will have four major thrusts:

1. Basic research design and statistics for personnel engaged in experimental research programs.

2. Advanced research design and statistics for personnel engaged in experimental research programs.

3. Upgrading of research design and management skills for practitioners in local education agencies.

4. Helping instructional supervisors in local education agencies to understand, interpret and utilize the results of educational research.

KEY SPEAKERS: Program A - Fundamentals of Research Design and Statistical Analysis

J. Robert Warmbrod, Professor
Department of Agricultural Education
The Ohio State University

John E. Miller, Dean
Community Education
Siena Heights College
Adrian, Michigan

Program B - Advanced Research Design and Statistical Analysis

William Rabinowitz, Professor
Department of Educational Psychology
The Pennsylvania State University

John J. Kennedy, Associate Professor
Department of Educational Development
The Ohio State University

Program C - The Design and Analysis of Research Projects by Local Educational Agency Personnel

William Brown, Director
Division of Research
North Carolina State Department of Public Instruction

Steven J. Gyuro, Research Specialist
The Center for Vocational Education
The Ohio State University

Program D - The Interpretation and Utilization of Research Findings by Local Educational Agency Personnel

William Hull, Program Director
R & D Operations Division
The Center for Vocational Education
The Ohio State University

Walter Cameron, Assistant Director
Tennessee State Research Coordinating Unit
The University of Tennessee

TARGET PARTICIPANTS OR POPULATION:

Program A - Persons finding this program helpful include those who have had no exposure or only limited exposure to formal courses or work experience, and/or have limited research responsibilities (i.e., beginning RCU staff, local directors/coordinators of vocational education, graduate students and others needing a refresher or introductory training in program area, etc.).

Program B - Persons enrolling in this program should have completed the introductory research and statistical courses and have responsibility for assisting or leading others in the planning of research and performing statistical analysis (i.e., college professors, state RCU administrators and staff, and graduate students).

Program C - Local education persons and others with responsibility for planning, coordinating, and assessing research projects will find this program helpful (i.e., school administrators, projects directors for title III programs, prospective project directors, etc.).

Program D - Persons responsible for the utilization of research and development products in vocational education, career development and manpower programs in local schools and related educational institutions will find this program

helpful (i.e., exemplary project leaders, principals/ supervisors, curriculum leaders, career education task force leaders, teachers, guidance and placement personnel, etc.).

WHOM TO CONTACT FOR MORE DETAILS:

Dr. Dan Koble
The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

Telephone: 614/486-3655

REGION V

WHAT: Seventh Annual National Leadership Development Seminar for State Directors of Vocational Education

WHEN: September 24-26, 1974

WHERE: Columbus, Ohio

WHY: The seminar will increase the knowledge and awareness of participants in the curriculum development areas of:

1. Vocational education programs for persons with special needs

   a. handicapped
   b. disadvantaged
   c. institutionalized (corrections)

2. State-level programs to facilitate the dissemination and implementation of new curriculum ideas

   a. use of EPDA, Sections 552-553, funds
   b. use of state curriculum centers
   c. use of simulation or role-playing for curriculum modification
   d. supervisory programs for curriculum improvement

3. Implementing programs of orientation and exploratory career education activities (pre-vocational activities)

   a. defining pre-vocational activities
   b. legislative programs to support pre-vocational programs
   c. planning programs of orientation and exploratory career education
   d. implementing and monitoring pre-vocational programs

4. Using the output from management information systems for curriculum improvement and related activities

   a. unique state management information systems
   b. Center management information system
   c. Project Baseline

5. The role of the state vocational education agency in improving curricula in local educational agencies

KEY SPEAKERS: Henry M. Brickell
Policy Studies
New York

Lowell Burkett
Executive Director
American Vocational Association

John P. Cicero
Education Research and Development Manager
Instructor Training
Xerox International Center for Training and Management Development

Nevin R. Frantz
Associate Professor
Occupational Teacher Education
University of Delaware

Kenneth Hoyt
Associate Commissioner
Office of Career Education
U. S. Office of Education

Albert J. Riendeau, Chief
Postsecondary and Adult Occupational Programs Branch
Division of Vocational and Technical Education
U. S. Office of Education

Elizabeth Simpson
College of Family Development and Consumer Resources
University of Wisconsin

Ralph W. Tyler
Director Emeritus
The Center for Advanced Study in the Behavioral Sciences
Science Research Associates

Lane Murray, Superintendent
Windham School District
Texas Department of Corrections

TARGET PARTICIPANTS OR POPULATION: State directors of vocational education and key members of their staff in the area of curriculum activities.

WHOM TO CONTACT FOR MORE DETAILS:

Dr. Dan Koble
The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

Telephone: 614/486-3655

REGION V

WHAT: Eighth Annual National Vocational Education Personnel Development Seminar

WHEN: October 28-31, 1974

WHERE: Madison, Wisconsin

WHY:

1. To identify trends and changes needed for the inservice education of persons engaged in programs of vocational education at all levels.

2. To provide an opportunity for the development of self-improvement of individuals who are responsible for upgrading professional personnel in vocational education.

3. To increase the knowledge or awareness of participants in the inservice areas of:

   a. principles and strategies of inservice personnel development.

   b. needs identification for, and program evaluation of, inservice personnel development.

   c. supervising teachers; selection and renewal.

   d. recertification and competency-based standards.

   e. trends, issues, and problems.

   f. career development for professional personnel.

KEY SPEAKERS: Fred S. Wilhelms
Educational Consultant
Lincoln, Nebraska

Gordon I. Swanson
Professor and Coordinator
International Education
University of Minnesota

Robert M. Worthington
Career Development Associates
Princeton, New Jersey

Robert E. Taylor, Director
The Center for Vocational Education
The Ohio State University

Alden Vanderpool
Teacher Education Executive
California Teacher Association

Darrell R. LeBlanc
Vocational Education Division
University of New Brunswick

Arthur Blumberg
Professor of Educational Administration and Supervision
Syracuse University

TARGET PARTICIPANTS OR POPULATION: Teacher educators, administrators of teacher education, and state supervisors of all vocational service areas; vocational guidance personnel; state directors of vocational-technical education; deans of education; instructional supervisors in local schools and supervising teachers; graduate students; personnel of the U. S. Office of Education; and relevant professional organization representatives.

WHOM TO CONTACT FOR MORE DETAILS:

Dr. Dan Koble
The Center for Vocational Education
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210

Telephone: 614/486-3655

REGION VI

WHAT: National Workshop on the Initiation and Implementation of a Management by Objectives System in Selected States

WHEN: February 24-26, 1975

March 10-12, 1975

WHERE: Tulsa, Oklahoma

WHY:

1. To initiate, develop, and implement a management by objectives system in 12 selected state departments of vocational and technical education.

2. To train 360 persons from 12 state departments of vocational and technical education to the level of competency necessary to implement an MBO system in their educational organizations.

3. To develop the competencies of 360 persons from 12 state departments of vocational and technical education to write and assist others in writing educational organization goals and objectives and an individual's job functions and performance objectives.

KEY SPEAKERS: Dr. William W. Stevenson
Dr. Charles O. Hopkins
Dr. Fern Green
Mr. Larry Johnson

(All from the Oklahoma State Department of Vocational and Technical Education)

TARGET PARTICIPANTS OR POPULATION: Approximately 360 participants from 12 state departments of vocational and technical education.

WHOM TO CONTACT FOR MORE DETAILS:

Dr. William Stevenson, Assistant State Director
The Oklahoma State Department of Vocational and Technical Education
1515 West Sixth Street
Stillwater, Oklahoma 74074

Telephone: 405/377-2000

REGION VII

WHAT: The Career Education Personnel Development Consortium Project (An Exemplary Project in Personnel Development)

WHY:

1. To assess the needs for career education personnel development in the 28 school district consortium.

2. To develop a plan for each district to meet the personnel development needs in career awareness, exploration and vocational education.

3. To provide inservice programs for each district as indicated, and for the 28 districts, according to the combined needs of the region.

4. To establish teacher training centers for the Teacher Education Department of Kansas State College, so that the preservice teacher education program will have supervised career education teacher education positions.

TARGET PARTICIPANTS OR POPULATION: Approximately 28 participants

WHOM TO CONTACT FOR MORE DETAILS:

Dr. W. A. Rumbaugh
Personnel Development Coordinator
State Board for Vocational Education
State Department of Education
Topeka, Kansas 66612

Telephone: 913/296-2241

REGION VIII

WHAT: A National Demonstration Project for Implementing a Business, Industry, Labor and Education Exchange Program for Vocational Education Personnel

WHEN: September 1, 1974-September 30, 1975

WHERE: North Dakota

WHY:

1. The vocational education participants will be able to structure their classroom teaching after the model of their learning experiences.

2. The vocational education participants will be able to reconstruct their methodology of teaching to include the skills and knowledges currently required in their special areas.

3. The vocational education participants will be able to synthesize their learning experiences during the work experience program.

4. The vocational education participants will be able to demonstrate those skills and techniques to their students.

5. The business and industry participants will be able to work more closely with the students and educators in the classroom so as to give a greater understanding of the needs and problems at that level in order for them to become better prepared once the students come to the job.

TARGET PARTICIPANTS OR POPULATION: Approximately 60 vocational education teachers from North Dakota and approximately 60 people from industry.

WHOM TO CONTACT FOR MORE DETAILS:

Mr. Wayne Boekes
Supervisor of Industry and Education Programs
University of North Dakota
900 East Boulevard
Bismarck, North Dakota 58505

Telephone: 701/224-2711

REGION IX

WHAT: National Advisory Committee Meeting on Strategies on High-Level Policy-Making

WHEN: December 16-17, 1974

WHERE: Washington, D. C.

WHY: To identify high-level decision-makers and invite them to participate in the project activities so that they can develop the techniques which will secure concentrated action in the implementation and expansion of career and vocational education within the states.

TARGET PARTICIPANTS OR POPULATION: Approximately 25 National Advisory Committee members.

WHOM TO CONTACT FOR MORE DETAILS:

Dr. Melvin Barlow
Professor of Education
Graduate School of Education
University of California at Los Angeles
405 Hilgard Avenue
Los Angeles, California 90024

Telephone: 213/825-1941

REGION X

WHAT: Greater Involvement of Indian People in Vocational Teacher Education

WHEN AND WHERE: June 13-August 15, 1974
Central Washington State College

Selected colleges during the 1974-75 school year

WHY:

1. To provide a program that will identify 12 to 15 Indian people presently possessing "journeyman-level" skills in a trade or occupation, and who have displayed the potential to become vocational teachers, but who have need to develop further teaching competencies.

2. To provide each with a minimum of 90 clock hours of instruction and a minimum of 180 clock hours of teaching experience (practicum) under the supervision of a qualified vocational teacher with occupational expertise in the same vocational field.

KEY SPEAKER: Mr. Cal Dupree
Program Assistant for Native American Education and Community Affairs
Washington State Board for Community College Education

TARGET PARTICIPANTS OR POPULATION: Approximately 12 to 15 Indian people who have the potential to become vocational teachers.

WHOM TO CONTACT FOR MORE DETAILS:

Mr. Archie Breslin
Personnel Development Coordinator
State Board for Vocational Education
State Department of Education
216 Old Capitol Building
Olympia, Washington 98504

Telephone: 206/753-5680

THE CENTER

John K. Coster, Director

The Center for Occupational Education at North Carolina State University at Raleigh is a research and development center established in 1965 under the provisions of the Vocational Education Act of 1963. The Center has been established as an integral unit within the School of Education at North Carolina State University, and its major programs are supported by contracts with the National Institute of Education. The Center has as its mission the provision--through research, development, and related activities--of a continuing contribution to the improvement of occupational education. The major research and development programs of the Center focus on the relationship of occupational education to its context or environment. The frame of reference for occupational education includes its relationship to regional economy, politics, and the employment or work environment. In addition to its primary programs, the Center also maintains a Division of Special Service Projects which provides the capability for flexible action within the Center's overall mission. Funding for these projects is not maintained through the Center's federal grant, but, rather, negotiated on a project-by-project basis with contracting agencies.

ACCESSION NUMBER: VT102389

PUBLICATION DATE: MAY74

TITLE: A NEW STRATEGY FOR JOB ENRICHMENT.

PERSONAL AUTHOR: HACKMAN, J. RICHARD; AND OTHERS

DESCRIPTOR: *JOB DEVELOPMENT; JOB SATISFACTION; MOTIVATION; *WORK SIMPLIFICATION; *JOB ANALYSIS; *CHANGE STRATEGIES

EDRS PRICE: MF AND HC AVAILABILITY WILL BE ANNOUNCED IN VOL. 9, NO. 3.

DESCRIPTIVE NOTE: 39P.

ABSTRACT: IN THIS DOCUMENT, A NEW STRATEGY FOR REDESIGNING JOBS TO INCREASE THE WORK MOTIVATION AND SATISFACTION OF EMPLOYEES IS DESCRIBED. INCLUDED IS A STATEMENT OF THE THEORY ON WHICH THE STRATEGY IS BASED, DISCUSSION OF HOW TO CARRY OUT AND INTERPRET A DIAGNOSIS OF JOBS PRIOR TO CHANGE, AND SPECIFICATION OF ACTION STEPS FOR JOB REDESIGN WHICH HAVE BEEN FOUND TO LEAD TO BENEFICIAL PERSONAL AND ORGANIZATIONAL OUTCOMES. THE REPORT, WHICH IS ORIENTED PRIMARILY TO MANAGERS AND BEHAVIORAL SCIENCE PRACTITIONERS IN ORGANIZATIONS, CONCLUDES WITH A SUMMARY OF FINDINGS FROM ORGANIZATIONAL TESTS OF THE THEORY AND THE CHANGE STRATEGY. (AUTHOR/LJ)

INSTITUTION NAME: YALE UNIV., NEW HAVEN, CONN. DEPT. OF ADMINISTRATIVE SCIENCES.

VT 102389

A NEW STRATEGY FOR JOB ENRICHMENT

J. Richard Hackman
Yale University

Greg Oldham
University of Illinois

Robert Janson and Kenneth Purdy
Roy W. Walters & Associates

Technical Report No. 3
Department of Administrative Sciences
Yale University

May, 1974

Abstract

A new strategy for redesigning jobs to increase the work motivation and satisfaction of employees is described. Included is a statement of the theory on which the strategy is based, discussion of how to carry out and interpret a diagnosis of jobs prior to change, and specification of action steps for job redesign which have been found to lead to beneficial personal and organizational outcomes. The report, which is oriented primarily to managers and behavioral science practitioners in organizations, concludes with a summary of findings from organizational tests of the theory and the change strategy.

This report was prepared in connection with research supported by the Manpower Administration, U. S. Department of Labor, under research and development grant No. 21-09-74-14, and by the Office of Naval Research (Organizational Effectiveness Research Program, Contract N00014-67A-0097-0026, NR 170-744). Since grantees conducting research and development under Government sponsorship are encouraged to express their own judgment freely, this report does not necessarily represent the official opinion or policy of the Department of Labor. The grantee is solely responsible for the contents of this report.

VT 102389

BIBLIOGRAPHIC DATA SHEET	1. Report No. DLMA 21-09-74-14-1	2.	3. Recipient's Accession No.

4. Title and Subtitle	5. Report Date
A New Strategy for Job Enrichment	May, 1974
	6.
7. Author(s) J. Richard Hackman, Greg Oldham, Robert Janson & Kenneth Purdy	8. Performing Organization Rept. No.
9. Performing Organization Name and Address Department of Administrative Sciences Yale University 56 Hillhouse Ave. New Haven, Connecticut 06520	10. Project/Task/Work Unit No. 11. Contract/Grant No. DL 21-09-74-14
12. Sponsoring Organization Name and Address U.S. Department of Labor Manpower Administration Office of Research and Development 601 D Street, N.W., Washington, D.C. 20213	13. Type of Report & Period Covered Scientific 14.

15. Supplementary Notes

To be published in California Management Review, 1975

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17. Key Words and Document Analysis. 17a. Descriptors

Attitudes
Automation
Effectiveness
Evaluation
Job Analysis
Job Description
Job Satisfaction
Motivation
Performance
Personnel management
Productivity
Upgrading

17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group 5A

18. Availability Statement	19. Security Class (This Report)	21. No. of Pages
Distribution is unlimited. Available from National Technical Information Service, Springfield, Va. 22151.	UNCLASSIFIED	32
	20. Security Class (This Page) UNCLASSIFIED	22. Price

FORM NTIS-35 (REV. 3-72) THIS FORM MAY BE REPRODUCED USCOMM-DC 14952-P72

A New Strategy for Job Enrichment[1]

J. Richard Hackman
Yale University

Greg Oldham
University of Illinois

Robert Janson and Kenneth Purdy
Roy W. Walters & Associates

Practitioners of job enrichment have been living through a time of excitement, even euphoria. Their craft has moved from the psychology and management journals to the front page and the Sunday supplement. Job enrichment, which began with the pioneering work of Herzberg and his associates, originally was intended as a means to increase the motivation and satisfaction of people at work--and to improve productivity in the bargain.[2] Now it is being acclaimed in the popular press as a cure for problems ranging from inflation to drug abuse.

Much current writing about job enrichment is enthusiastic, sometimes even messianic, about what it can accomplish. But the hard questions of exactly what should be done to improve jobs, and how, tend to be glossed over. Lately, because the harder questions have not been dealt with adequately, critical winds have started to blow. Job enrichment has been described as yet another "management fad," as "nothing new," even as a fraud. And reports of job enrichment failures are beginning to appear in management and psychology journals.

This article attempts to redress the excesses which have characterized some of the recent writings about job enrichment. As job enrichment increases in popularity as a management tool, top managers inevitably will find themselves making decisions about its use. The intent of this paper is to help both managers and behavioral sciences practitioners become better able to make those decisions on a solid base of fact and data.

Succinctly stated, we present here a new strategy for going about the redesign of work. The strategy is based on three years of collaborative work and cross-fertilization among the authors--two of whom are academic

researchers, and two of whom are active practitioners in job enrichment. Our approach is new, but it has been tested in many organizations. It draws on the contributions of both management practice and psychological theory--but it is firmly rooted in the middle ground between them. It builds on and complements previous work by Herzberg and others, but provides for the first time a set of tools for diagnosing existing jobs--and a map for translating the diagnostic results into specific action steps for change.

What we have, then, is the following:

1. A theory which specifies when people will get personally "turned on" to their work. The theory shows what kinds of jobs are most likely to generate excitement and commitment about work, and what kinds of employees it works best for.

2. A set of action steps for job enrichment based on the theory, which prescribe in concrete terms what to do to make jobs more motivating for the people who do them.

3. Evidence that the theory holds water, and that it can be used to bring about measurable--and sometimes dramatic--improvements in employee work behavior, in job satisfaction, and in the financial performance of the organizational unit involved.

THE THEORY BEHIND THE CHANGE STRATEGY

What Causes People To Get Turned On To Their Work?

For workers who are really prospering in their jobs, work is likely to be a lot like play. Consider, for example, a golfer at a driving range, practicing to get rid of a hook. His activity is meaningful to him; he has chosen to do it because he gets a "kick" from testing his skills by playing the game. He knows that he alone is responsible for what happens when he hits the ball. And he has knowledge of the results within a few seconds.

Behavioral scientists have found that the three "Psychological States" experienced by the golfer in the above example also are critical in determining a person's motivation and satisfaction on the job.

1. Experienced meaningfulness: The individual must perceive his work as worthwhile or important by some system of values he accepts.

2. Experienced responsibility: He must believe that he personally is accountable for the outcomes of his efforts.

3. Knowledge of results: He must be able to determine, on some fairly regular basis, whether or not the outcomes of his work activities are satisfactory.

When these three conditions are present, an individual tends to feel very good about himself when he performs well. And those good feelings will prompt him to try to continue to do well--so he can continue to earn these positive feelings in the future. That is what is meant by "internal motivation"--being turned onto one's work because of the positive internal feelings that are generated by doing well, rather than being dependent on external factors (such as incentive pay or compliments from the boss) for the motivation to work effectively.

What if one of the three Psychological States is missing? Motivation drops markedly. Suppose, for example, that our golfer has settled in at the driving range to practice for a couple of hours. Suddenly a fog drifts in over the range. He can no longer see if the ball starts to tail off to the left a hundred yards out. The satisfaction he got from hitting straight down the middle--and the motivation to try to correct something whenever he didn't--are both gone. If the fog stays, it's likely that he soon will be packing up his clubs.

The relationship between the three Psychological States and on-the-job outcomes are illustrated in Figure 1. When all three are high, then internal work motivation is high, job satisfaction is high, work quality is

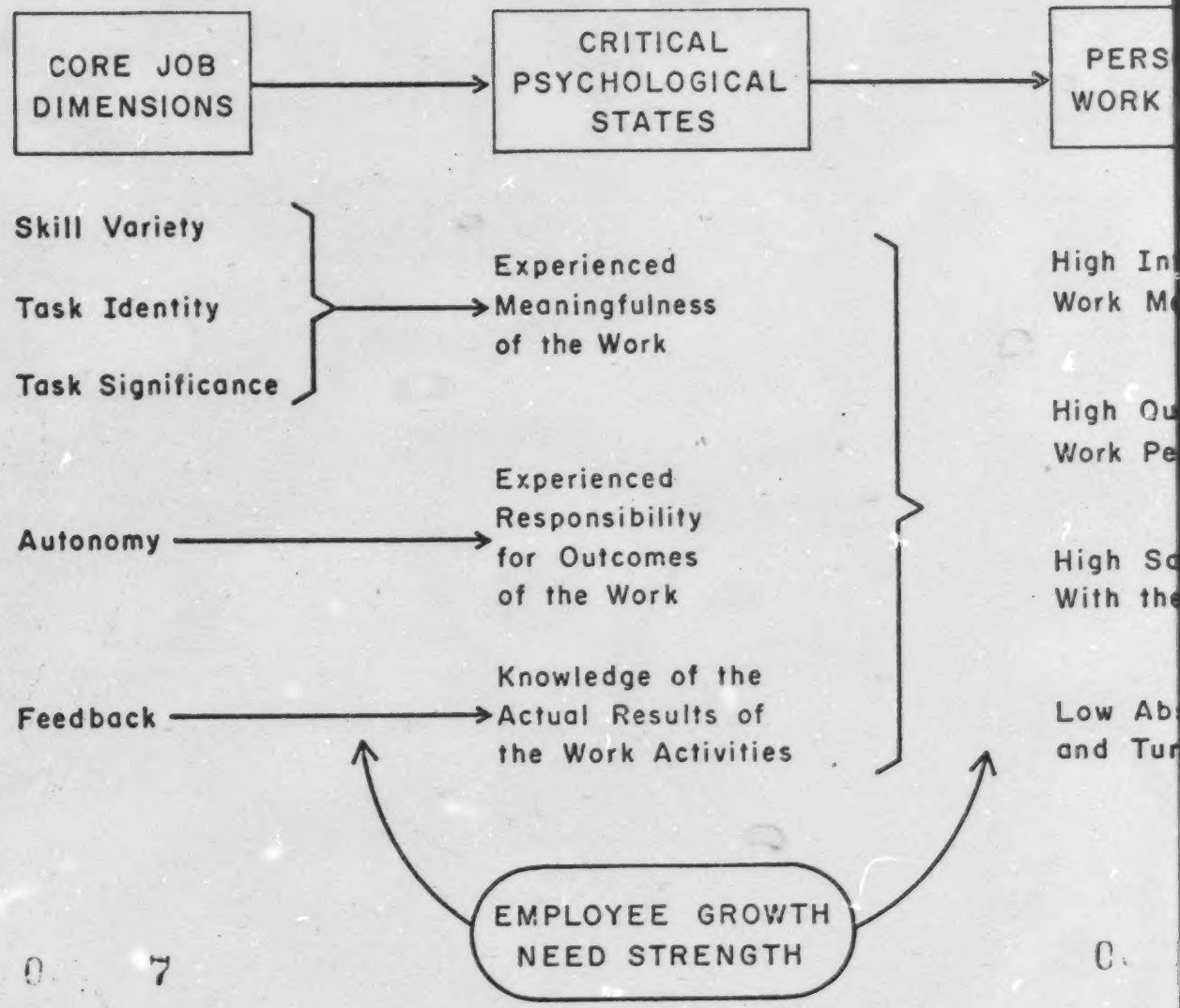

Figure 1

The Relationships Among the Core Job Dimensions, The Critical Psychological States, and On-the-job Outcomes

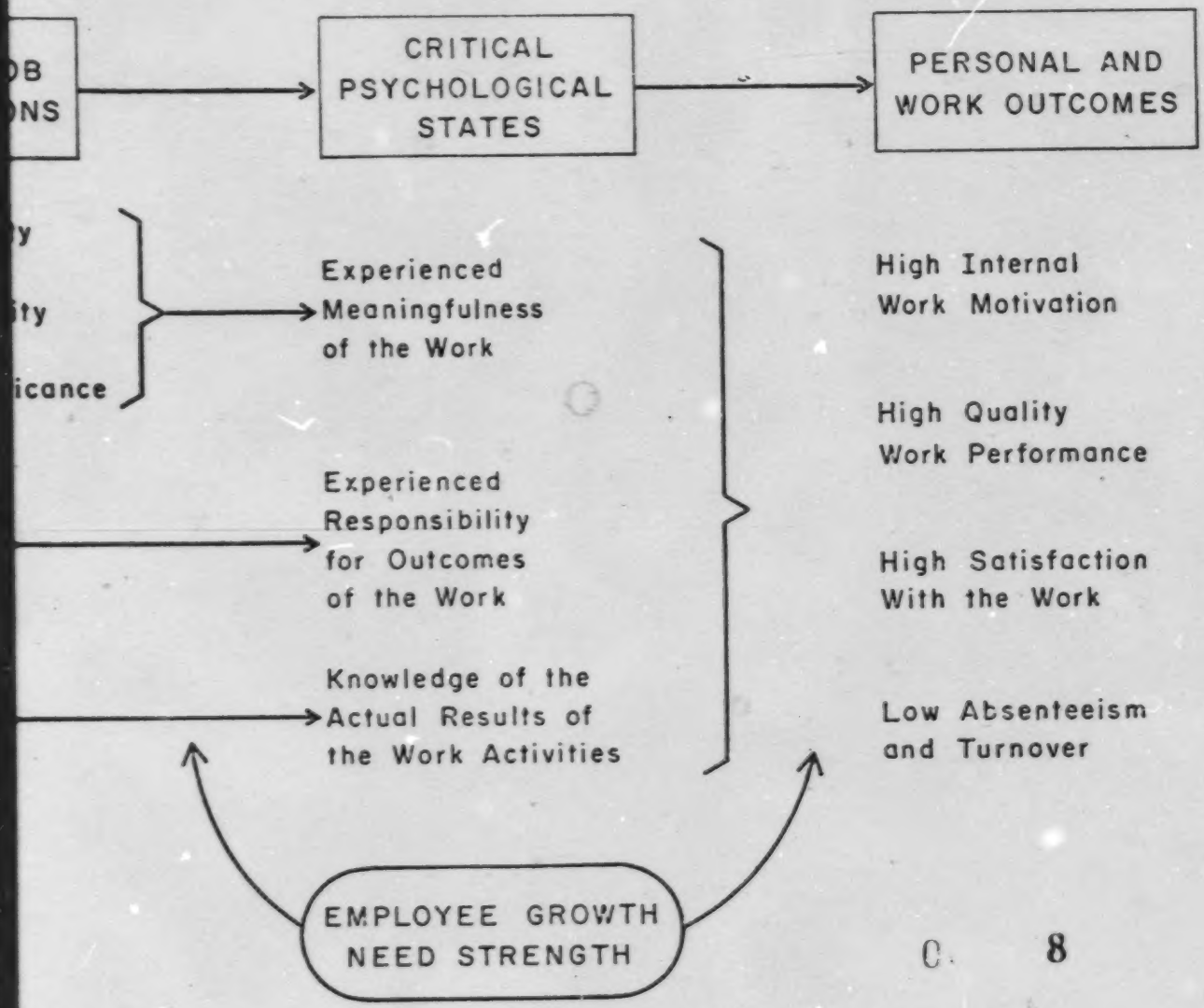

Figure 1

The Relationships Among the Core Job Dimensions, The Critical Psychological States, and On-the-job Outcomes

high, and absenteeism and turnover are low.

What Job Characteristics Make It Happen?

Recent research has identified five "core" characteristics of jobs which elicit the psychological states described above.[3] These five core job dimensions provide the key to objectively measuring jobs, and to changing them so they have high potential for motivating people who do them.

Toward Meaningful Work. Three of the five Core Dimensions contribute to a job's meaningfulness for the worker:

1. Skill Variety. The degree to which a job requires the worker to perform activities which challenge his skills and abilities. When even a single skill is involved, there is at least a seed of potential meaningfulness. When several are involved, the job has the potential of appealing to more of the whole person--and also of avoiding the monotony of performing the same task repeatedly, no matter how much skill it may require.

2. Task Identity. The degree to which the job requires completion of a "whole" and identifiable piece of work--doing a job from beginning to end with a visible outcome. For example, it is clearly more meaningful to an employee to build complete toasters than to attach electrical cord after electrical cord--especially if he never sees a completed toaster. (Note that the whole job, in this example, probably would involve greater skill variety as well as task identity.)

3. Task Significance. This is the degree to which the job has a substantial and perceivable impact on the lives of other people, whether in the immediate organization or the world at large. The worker who tightens nuts on aircraft brake assemblies is more likely to perceive his work as significant than the worker who fills small boxes with paper clips--even though the skill levels involved may be comparable.

Each of these three job dimensions represents an important route to experienced meaningfulness. If the job is high in all three, the worker is quite likely to experience his job as very meaningful. It is not necessary, however, for a job to be very high in all three dimensions. If the job is low in any one of them, there will be a drop in over-all experienced meaningfulness. But even when two dimensions are low the worker may find the job meaningful if the third is high enough.

Toward Personal Responsibility. A fourth core dimension leads a worker to experience increased responsibility in his job. This is Autonomy, the degree to which the job gives the worker freedom, independence, and discretion in scheduling work and determining how he will carry it out. People in highly autonomous jobs know that they are personally responsible for successes and failures. To the extent that their autonomy is high, then, how the work goes will be felt to depend more on the individual's own efforts and initiatives--rather than on detailed instructions from the boss or from a manual of job procedures.

Toward Knowledge of Results. The fifth and last core dimension is Feedback. This is the degree to which a worker, in carrying out the work activities required by the job, gets information about the effectiveness of his efforts. Feedback is most powerful when it comes directly from the work itself--as for example, when a worker has the responsibility for gauging and otherwise checking a component he has just finished, and learns in the process that he has lowered his reject rate by meeting specifications more consistently.[4]

Summary: The Overall "Motivating Potential" of a Job. Figure 1 shows how the five Core Dimensions combine to affect the psychological states which are critical in determining whether or not an employee will be internally motivated to work effectively. Indeed, using an instrument to be described later, it is possible to compute a "Motivating Potential Score" (MPS) for any

job. The MPS provides a single summary index of the degree to which the objective characteristics of the job will prompt high internal work motivation. Following the theory outlined above, a job high in Motivating Potential must be high on at least one (and hopefully more) of the three dimensions which lead to experienced meaningfulness, and high on both autonomy and feedback as well. The MPS provides a quantitative index of the degree to which this is in fact the case.[5] As will be seen later, the MPS can be very useful in diagnosing jobs and in assessing the effectiveness of job enrichment activities.

Does the Theory Work for Everybody?

Unfortunately not. Not everyone is able to become internally motivated in his work, even when the Motivating Potential of a job is very high indeed.

Research has shown that the psychological needs of people are very important in determining who can (and who cannot) become internally motivated at work. Some people have strong needs for personal accomplishment, for learning and developing themselves beyond where they are now, for being stimulated and challenged, and so on. These people are high in "growth need strength."

Figure 2 shows diagrammatically the proposition that individual growth needs have the power to moderate the relationship between the characteristics of jobs and work outcomes. Many workers with high growth needs will turn on eagerly when they have jobs which are high on the Core Dimensions. Workers whose growth needs are not so strong may respond less eagerly--or, at first, even balk at being "pushed" or "stretched" too far.

Psychologists who emphasize human potential argue that everyone has within him at least a spark of the need to grow and develop personally. Steadily accumulating evidence shows, however, that unless that spark is pretty strong, chances are it will get snuffed out by one's experiences in typical organizations. So, a person who has worked for 20 years in

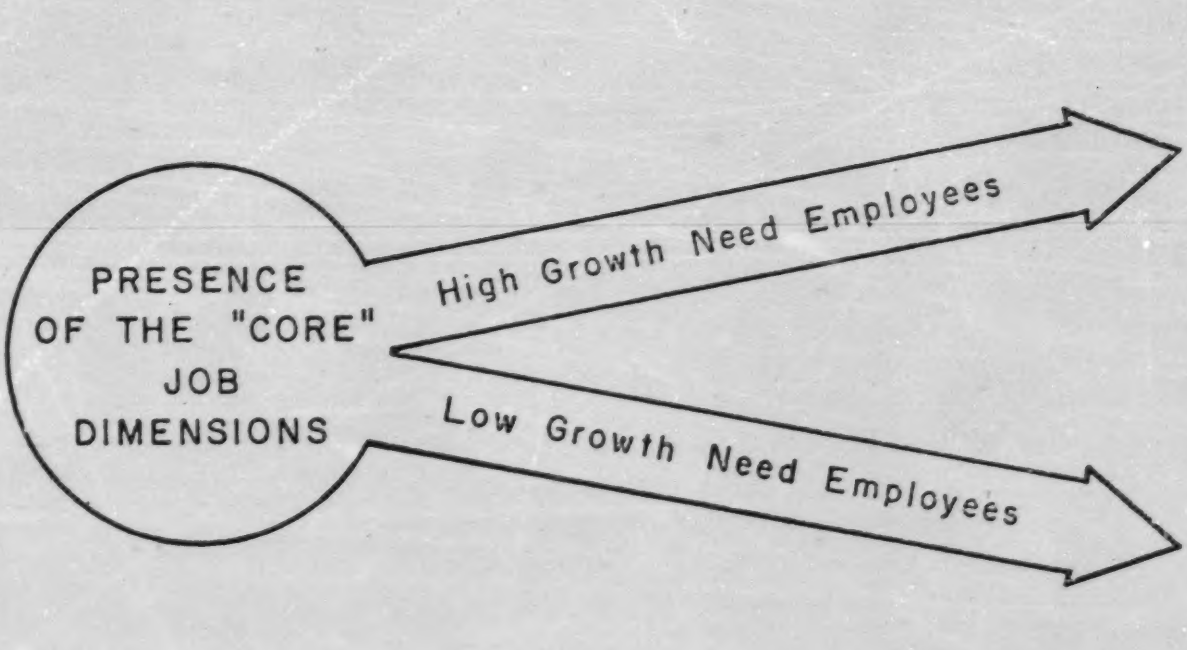

Figure 2

The Moderating Effect of Employee Growth Need Strength

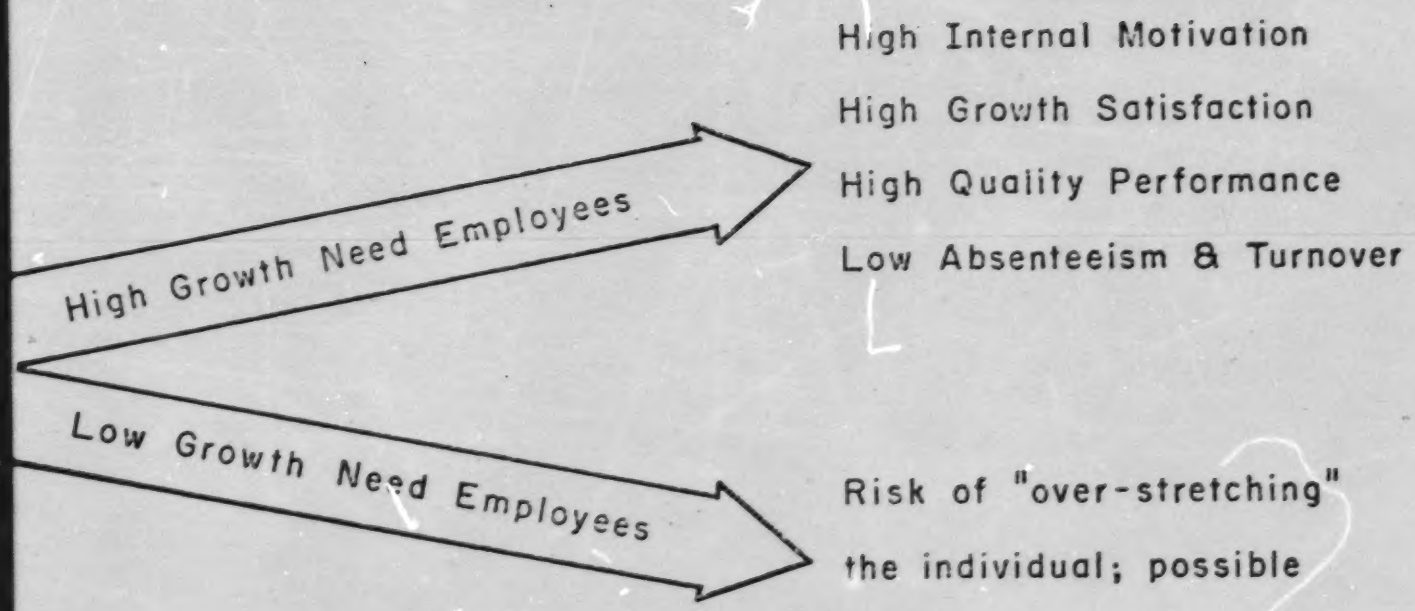

Figure 2

The Moderating Effect of Employee Growth Need Strength

stultifying jobs may find it difficult or impossible to become internally motivated overnight when given the opportunity.

We should be cautious, however, about creating rigid categories of people based on their measured growth need strength at any particular point in time. It is true that we can predict from these measures who is likely to become internally motivated on a job and who will be less willing or able to do so. But what we do not know yet is whether or not the growth need "spark can be rekindled for those individuals who have had their growth needs dampened by years of growth-depressing experience in their organizations.

Since, in many cases, it is the organization which is responsible for currently low levels of growth desires, we believe that the organization also should provide the individual with the chance to reverse that trend whenever it can. Even if that means putting a person in a job where he may be "stretched" more than he wants to be stretched right now. He can always move back later to the old job--and in the meantime the embers of his growth needs just might burst back into flame, to his surprise and pleasure, and to the good of the organization.

FROM THEORY TO PRACTICE: A TECHNOLOGY FOR JOB ENRICHMENT

When job enrichment fails, it often fails because of inadequate diagnosis of the target job and employees' reactions to it. Often, for example, job enrichment is assumed by management to be a solution to "people problems" on the job, and is implemented even though there has been no diagnostic activity to indicate that the root of the problem is in fact how the work is designed. Or, other times, some diagnosis is made--but it provides no concrete guidance about what specific aspects of the job require change. In either case, the success of job enrichment may wind up depending more on the quality of the intuition of the change agent--or his luck--than on a solid base of data about the people and the work.

In the paragraphs to follow, we outline a new technology for use in job enrichment which explicityly addresses the diagnostic as well as the action component of the change process. The technology has two parts:

1. A set of diagnostic tools which are useful in evaluating jobs and peoples' reactions to them prior to change--and in pinpointing exactly what aspects of specific jobs are most critical to a successful change attempt.

2. A set of "Implementing Concepts" which provide concrete guidance for action steps in job enrichment. The Implementing Concepts are tied directly to the diagnostic tools: the output of the diagnostic activity specifies which action steps are likely to have the most impact in a particular situation.

The Diagnostic Tools

Central to the diagnostic procedure we propose is a package of instruments to be used by employees, supervisors, and outside observers in assessing the target job and employees' reactions to it.[6] These instruments gauge the following:

1. The objective characteristics of the jobs themselves, including both an overall indication of the "motivating potential" of the job as it exists (i.e., the MPS score), and the score of the job on each of the five Core Dimensions described earlier. Because knowing the strengths and weaknesses of the job is critical to any work re-design effort, assessments of the job are made by supervisors and outside observers as well as the employees themselves--and the final assessment of a job uses data from all three sources.

2. The current levels of motivation, satisfaction, and work performance of employees on the job. In addition to satisfaction with the work itself, measures are taken of how people feel about other aspects of the work setting, such as pay, supervision, and relationships with co-workers.

3. The level of growth need strength of the employees. As indicated earlier, employees who have strong growth needs are more likely to be more

responsive to job enrichment than employees with weak growth needs. Therefore, it is important to know at the outset just what kinds of satisfactions the people who do the job are (and are not) motivated to obtain from their work. This will make it possible to identify which persons are best to start changes with, and which may need help in adapting to the new enriched job.

What, then, might be the actual steps one would take in carrying out a job diagnosis using these tools? Although the approach to any particular diagnosis depends upon the specifics of the particular work situation involved, the sequence of questions listed below is fairly typical.

Step 1. Are Motivation and Satisfaction Central to the Problem? Sometimes organizations undertake job enrichment to improve the work motivation and satisfaction of employees when in fact the real problem with work performance lies elsewhere--for example, in a poorly designed production system, in an error-prone computer, and so on. So the first step is to examine the scores of employees on the motivation and satisfaction portions of the diagnostic instrument. (The questionnaire taken by employees is called the "Job Diagnostic Survey," and will be refered to hereafter as the JDS). If motivation and satisfaction are problematic, the change agent would continue to Step 2; if not, he would look to other aspects of the work situation to identify the real problem.

Step 2. Is the Job Low in Motivating Potential? To answer this question, one would examine the Motivating Potential Score of the target job, and compare it to the MPS scores of other jobs to determine whether or not the job itself is a probable cause of the motivational problems documented in Step 1. If the job turns out ot be low on the MPS, one would continue to Step 3; if it scores high, attention should be given to other possible reasons for the motivational difficulties (e.g., the pay system, the nature of supervision, and so on).

Step 3. What Specific Aspects of the Job are Causing the Difficulty?

This step involves examining the job on each of the five Core Dimensions, to pinpoint the specific strengths and weaknesses of the job as it is currently structured. It is useful at this stage to construct a "profile" of the target job, to make visually apparent where improvements need to be made. An illustrative profile for two jobs (one "good" job and one job needing improvement) is shown in Figure 3.

Job "A" is an engineering maintenance job, and is high on all of the Core Dimensions; the MPS of this job is a very high 260.[7] Job enrichment would not be recommended for this job; if employees working on the job were unproductive and unhappy, the reasons are likely to have little to do with the nature or design of the work itself.

Job "B", on the other hand, has many problems. This job involves the routine and repetitive processing of checks in the "back room" of a bank. The MPS is 30, which is quite low--and indeed, would be even lower if it were not for the moderately high Task Significance of the job. (Task significance is moderately high because the people are handling large amounts of other people's money--and therefore the quality of their efforts potentially have important consequences for their unseen "clients.") The job provides the individuals with very little direct feedback about how effectively they are doing it; the employees have little autonomy in how they go about doing the job; and the job is moderately low in both skill variety and in task identity.

For Job B, then, there is plenty of room for improvement--and many avenues to examine in planning job changes. For still other jobs, the avenues for change often turn out to be considerably more specific: for example, feedback and autonomy may be reasonably high, but one or more of the Core Dimensions which contribute to the experienced meaningfulness of the job (i.e., skill variety, task identity, and task significance) may be

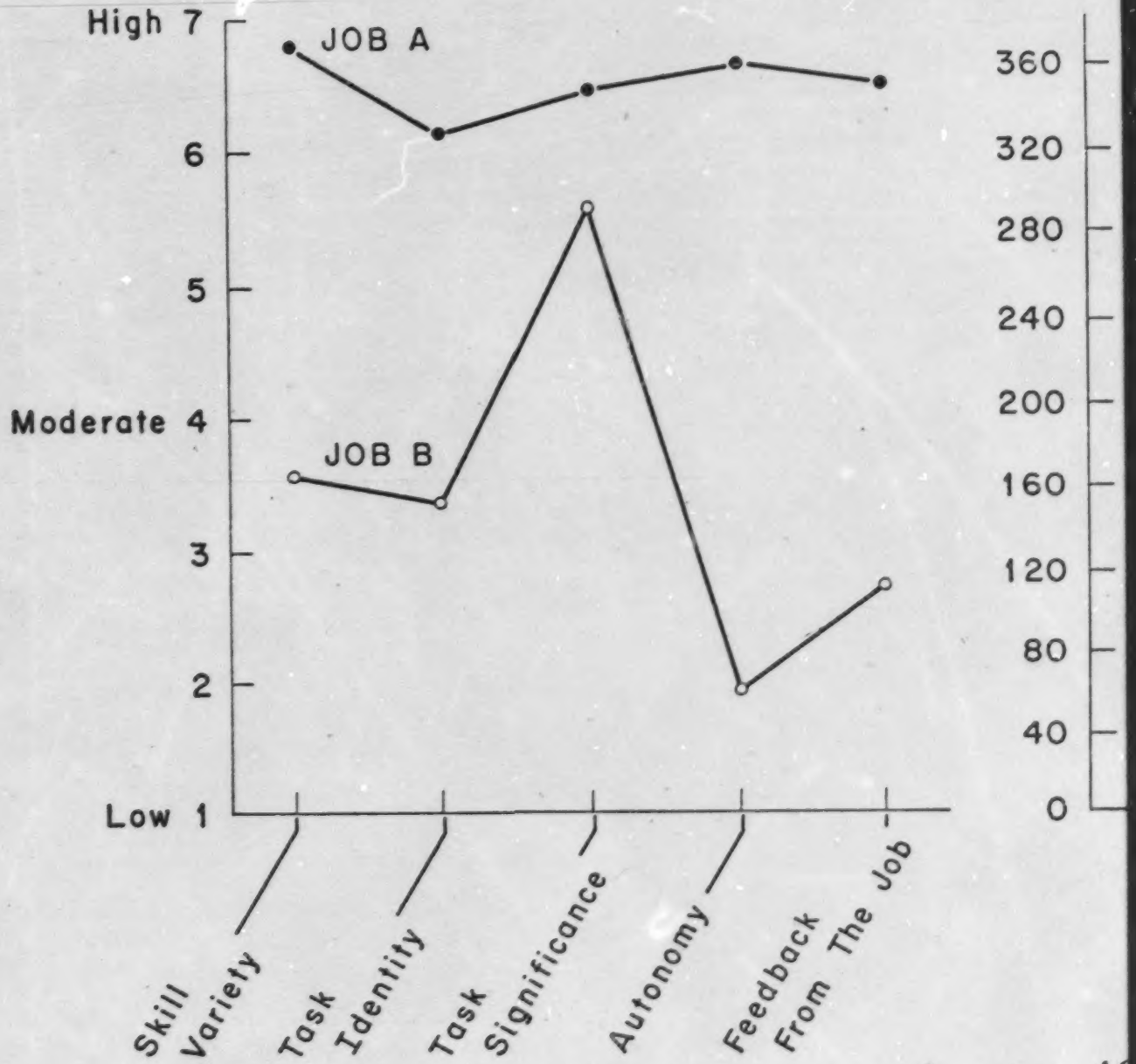

Figure 3

The JDS Diagnostic Profile for a "Good" and a "Bad" Job

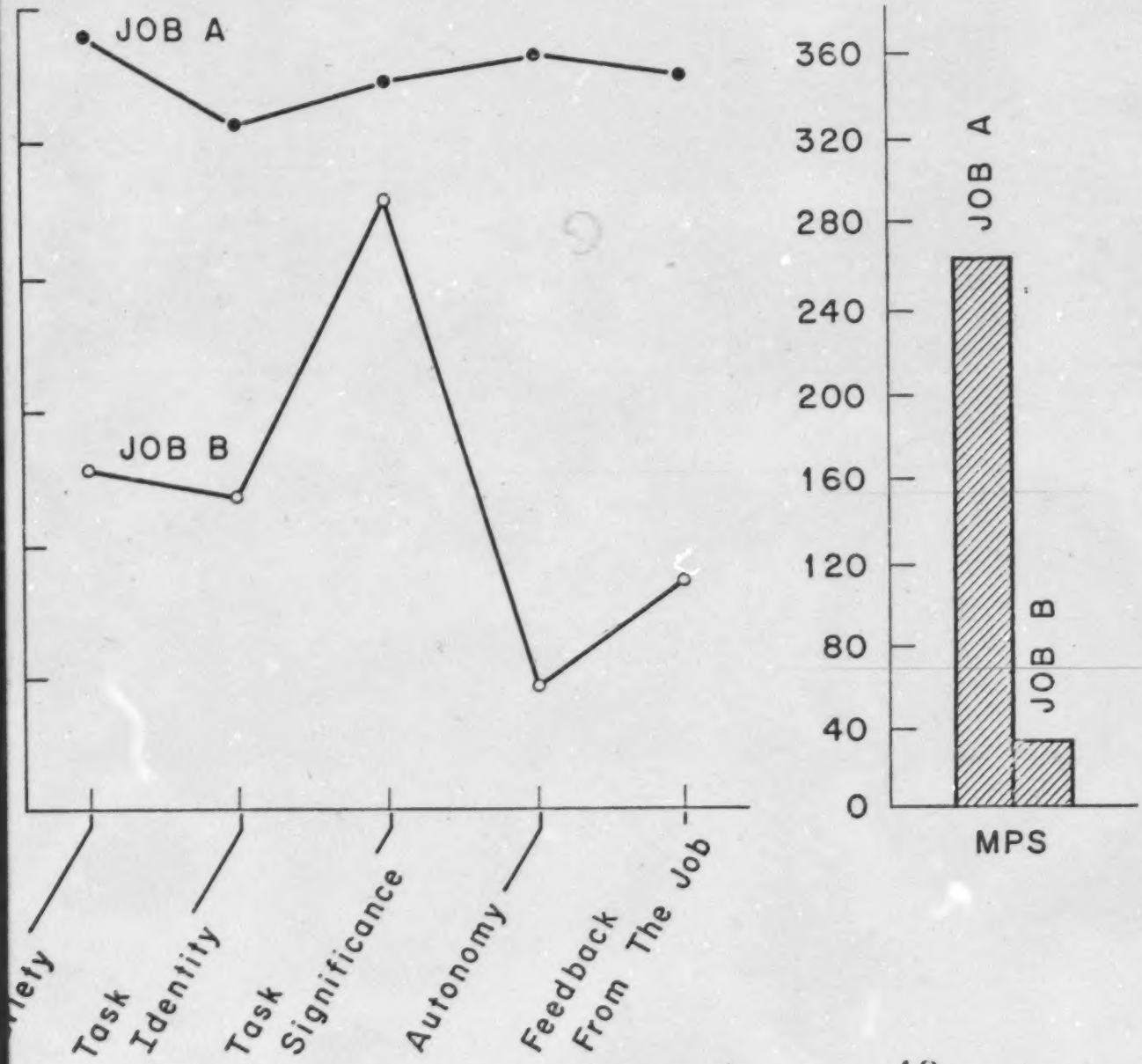

Figure 3

The JDS Diagnostic Profile for a "Good" and a "Bad" Job

low. In such a case, attention would turn to ways to increase the standing of the job on these latter three dimensions.

Step 4. How "Ready" Are the Employees For Change? Once it has been documented that there is need for improvement in the job--and the particularly troublesome aspects of the job have been identified--then it is time to begin to think about the specific action steps which will be taken to enrich the job. An important factor in such planning is the level of growth needs of the employees, since employees high on growth needs usually respond more readily to job enrichment than do employees with little need for growth. The JDS provides a direct measure of the growth need strength of the employees. This measure can be very helpful in planning how to introduce the changes to the people (e.g., cautiously vs. dramatically), and in deciding who should be among the first group of employees to have their jobs changed.

In actual use of the diagnostic package, additional information is generated which supplements and expands the basic diagnostic questions outlined above. The point of the above discussion is merely to indicate the kinds of questions which we believe to be most important in diagnosing a job prior to changing it. We now turn to how the diagnostic conclusions are translated into specific job changes.

The Implementing Concepts[8]

Five "implementing Concepts" for job enrichment are identified and discussed below. Each one is a specific action step aimed at improving both the quality of the working experience for the individual and his work productivity. They are:

1. Forming natural work units.
2. Combining tasks.
3. Establishing client relationships.
4. Vertical loading.
5. Opening feedback channels.

The links between the Implementing Concepts and the Core Dimensions are shown in Figure 4--which illustrates our theory of job enrichment, ranging from the concrete action steps through the Core Dimensions and the Psychological States to the actual personal and work outcomes.

After completing the diagnosis of a job, a change agent would know which of the Core Dimensions were most in need of remedial attention. He could then turn to Figure 4 and select those Implementing Concepts which specifically deal with the most troublesome parts of the existing job. How this would take place in practice will be seen below.

1. Forming Natural Work Units. The notion of distributing work in some logical way may seem to be an obvious part of the design of any job. In many cases, however, the logic is one imposed by just about any consideration except jobholder satisfaction and motivation. Such considerations include technological dictates; level of worker training or experience; "efficiency," as defined by industrial engineering; and current workload. In many cases the cluster of tasks a worker faces during a typical day or week is natural to anyone but the worker.

For example, suppose that a typing pool (consisting of one supervisor and ten typists) handles all work for one division of a company. Jobs are delivered in rough draft or dictated form to the supervisor, who distributes them as evenly as possible among the typists. In such circumstances the individual letters, reports, and other tasks performed by a given typist in one day or week are randomly assigned. There is no basis for identifying with the work or the person or department for whom it is performed, or for placing any personal value upon it.

The principle underlying natural units of work, by contrast, is "ownership"--a worker's sense of continuing responsibility for an identifiable body of work.

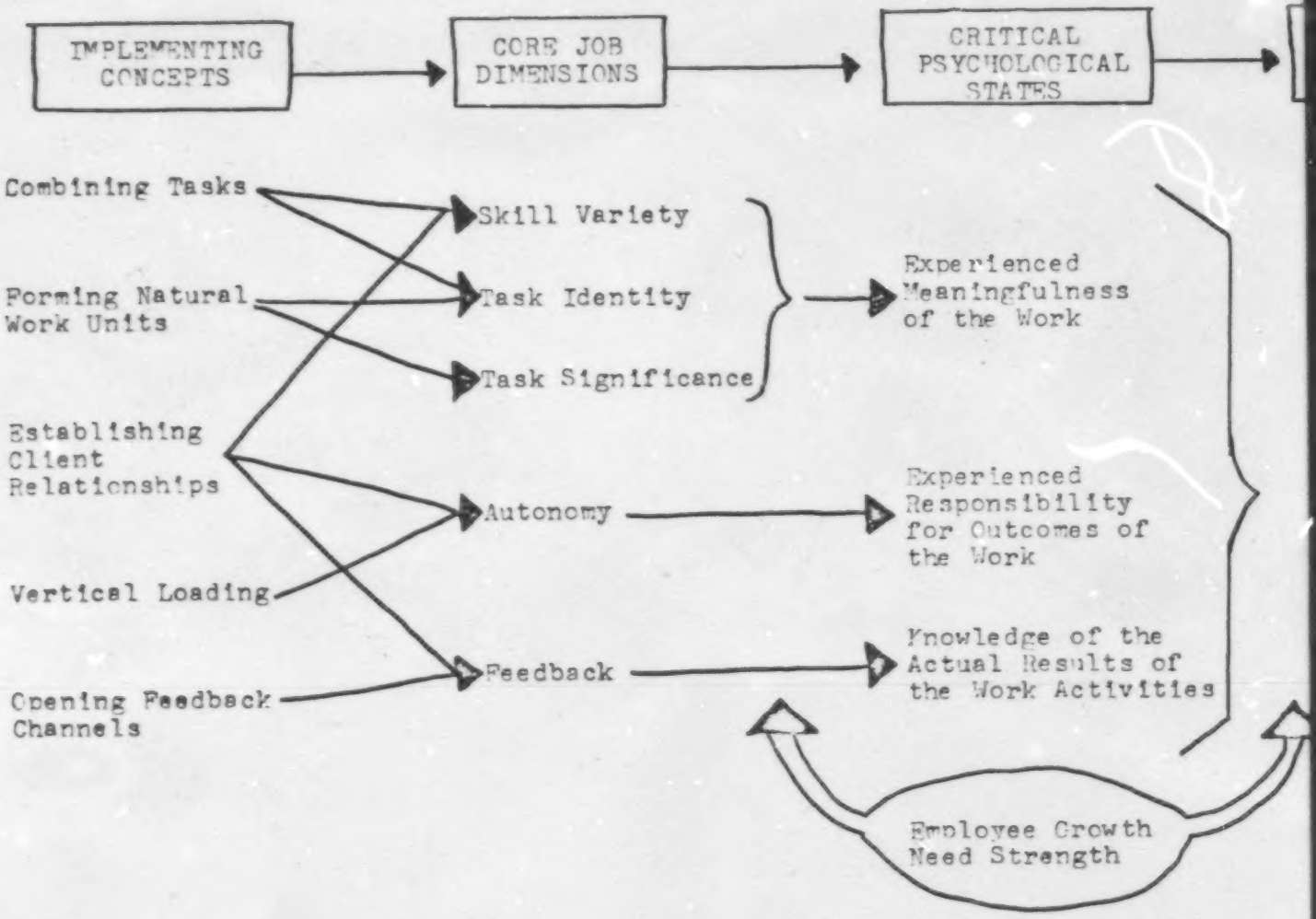

Figure 4

The Full Model: How Use of the Implementing Concepts Can Lead to Positiv

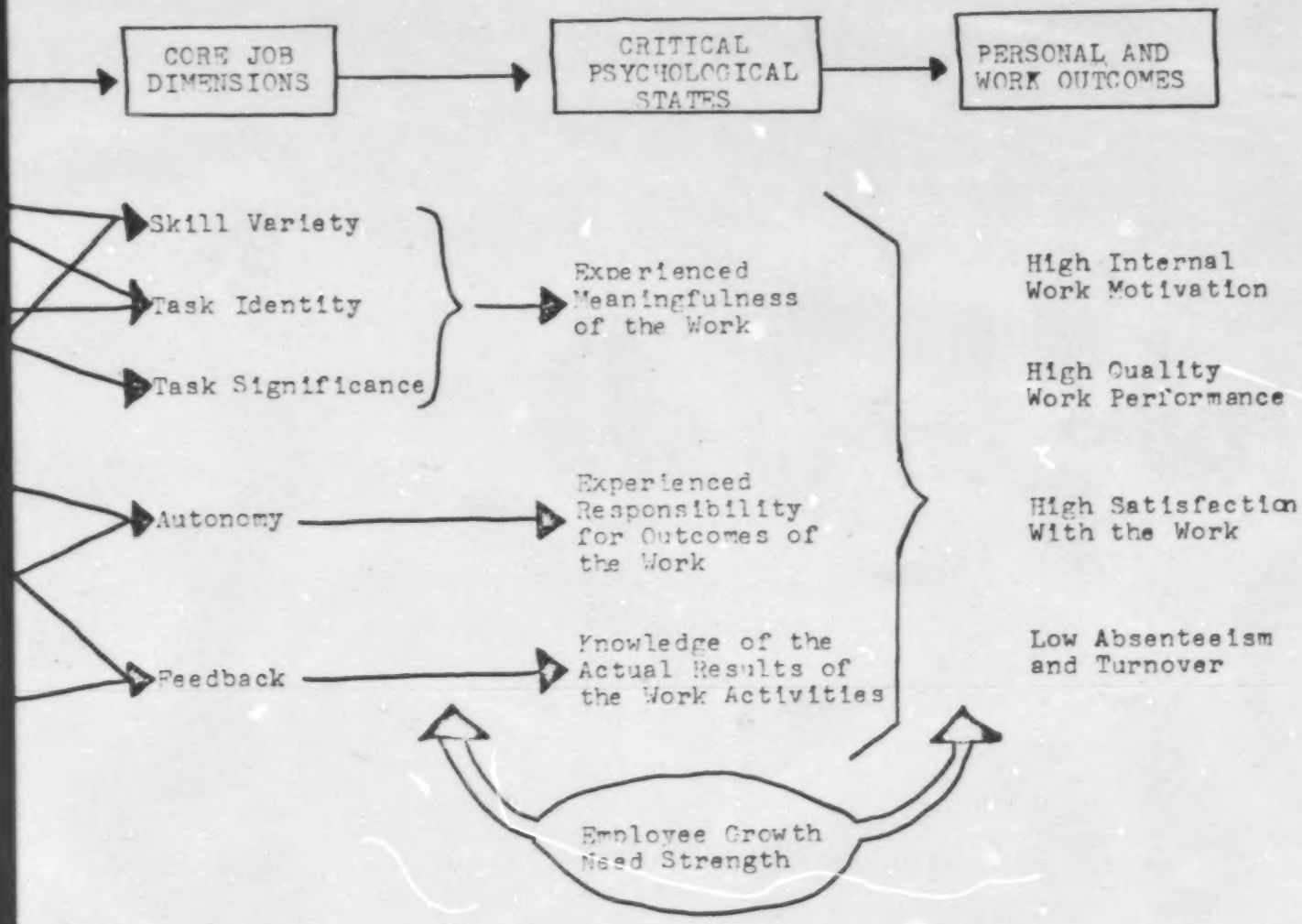

Figure 4

el: How Use of the Implementing Concepts Can Lead to Positive Outcomes

There are two steps involved in creating natural work units. The first is to identify the basic work items. In the typing pool, for example, the items might be "pages to be typed." The second step is to group the items in natural categories. For example, each typist might be assigned continuing responsibility for all jobs requested by one or several specific departments. The assignments should be made, of course, in such a way that workloads are about equal in the long run. (For example, one typist might end up with all the work from one busy department, while another handles jobs from several smaller "accounts.")

At this point we can begin to see specifically how the Job Design Principles relate to the Core Dimensions (cf. Figure 4). The "ownership" fostered by natural units of work can make the difference between a feeling that work is meaningful and rewarding and the feeling that it is irrelevant and boring. As the diagram shows, natural units of work are directly related to two of the Core Dimensions: Task Identity and Task Significance.

A typist whose work is assigned naturally rather than randomly--say, by departments--has a much greater chance of performing a whole job to completion. Instead of typing one section of a large report, the individual is likely to type the whole thing, with knowledge of exactly what the product of the work is (task identity). Furthermore, over time the typist will develop a growing sense of how the work affects co-workers in the department serviced (task significance).

2. Combining Tasks. The very existence of a pool made up entirely of persons whose sole function is typing reflects a fractionalization of jobs which has been a basic precept of "scientific management." Most obvious in assembly line work, fractionalization has been applied to non-manufacturing jobs as well. It is typically justified by "efficiency," which is usually defined in terms of either low costs or some time-and-motion type of criteria.

It is hard to find fault with measuring efficiency ultimately in terms of cost-effectiveness. In doing so, however, a manager should be sure to consider all the costs involved. It is possible, for example, for highly fractionalized jobs to meet all the time-and-motion criteria of "efficiency," but if the resulting job is so unrewarding that performing it day after day leads to high turnover, absenteeism, drugs and alcohol, and strikes, then productivity is really lower (and costs higher) than data on "efficiency" might indicate.

The principle of Combining Tasks, then, suggests that whenever possible existing and fractionalized tasks should be put together to form new and larger modules of work. At the Medfield, Massachusetts plant of Corning Glass Works the assembly of a laboratory hotplate has been redesigned along the lines suggested here. Each hotplate now is assembled from start to finish by one operator, instead of going through several separate operations which are performed by different people.

Some tasks, if combined into a meaningfully large module of work, would be more than an individual could do by himself. In such cases, it is often useful to consider assigning the new, larger task to a small team of workers--who are given great autonomy for its completion. At the Racine, Wisconsin plant of Emerson Electric, the assembly process for trash disposal appliances was restructured this way. Instead of a sequence of moving the appliance from station to station, the assembly is now done from start to finish by one team. Such teams include both men and women to permit switching off the heavier and more delicate aspects of the work. The team responsible is identified on the appliance. In case of customer complaints, the team often drafts the reply.

As a Job Design Principle, task combination, like natural units of work, expands the Task Identity of the job. For example, the hotplate assembler can see and identify with a finished product ready for shipment, rather than

a nearly invisible junction of solder. Moreover, the more tasks are combined into a single worker's job, the greater the variety of skills he must call on in performing the job. So, task combination also leads directly to greater Skill Variety--the third Core Dimension which contributes to the overall experienced meaningfulness of the work.

3. Establishing Client Relationships. One consequence of fractionalization is that the typical worker has little or no contact with (or even awareness of) the ultimate user of his product or service. By encouraging and enabling employees to establish direct relationships with the "clients" of their work, improvements often can be realized simultaneously on three of the Core Dimensions. Feedback increases, because of additional opportunities for the individual to receive praise or criticism of his work outputs directly. Skill Variety often increases, because of the necessity to develop and exercise one's interpersonal skills in maintaining the client relationship. And Autonomy can increase because the individual often is given personal responsibility for deciding how to manage his relationships with the "clients" of his work.

Creating client relationships is a three-step process. First, identification of who the client actually is. Second, establishing the most direct possible contact between the worker and the client. Third, setting up some criteria by which the client can judge the quality of the product or service he receives. And, whenever possible, the client should have a means of relaying his judgments directly back to the worker.

The contact between worker and client should be as great as possible, and as frequent as necessary. Face-to-face contact is highly desirable, at least occasionally. Where that is impossible or impractical, telephone and mail can suffice. In any case, it is important that the performance criteria by which the worker will be rated by the client must be mutually understood and agreed.

4. Vertical Loading. Typically the split between the "doing" of a job and the "planning" and "controlling" of the work has evolved along with horizontal fractionalization. Its rationale, once again, has been "efficiency through specialization." And, once again, the excess of specialization which has emerged has resulted in unexpected but significant costs in motivation, morale, and work quality. In vertical loading, the intent is to partially close the gap between the doing and the controlling parts of the job--and thereby reap some important motivational advantages.

Of all the Job Design Principles, vertical loading may be the single most crucial one. In some cases, where it has been impossible to implement any other changes, vertical loading alone has had significant motivational effects.

When a job is vertically loaded, responsibilities and controls which formerly were reserved for higher levels of management are added to the job. There are numerous means of carrying this out:

--Return to the job holder greater discretion in setting schedules, deciding on work methods, checking on quality, and advising or helping to train less experienced workers.

--Grant additional authority. The objective should be to advance workers from a position of no authority or highly restricted authority to positions of reviewed, and eventually, near-total authority for his own work.

--Time management. The job holder should have the greatest possible freedom to decide when to start and stop work, when to break, and how to assign priorities.

--Troubleshooting and crisis decisions. Workers should be encouraged to seek problem solutions on their own, rather than calling immediately for the supervisor.

--Financial controls. Some degree of knowledge and control over budgets and other financial aspects of a job can often be highly motivating. However, access to this information frequently tends to be restricted. Workers can benefit from knowing something about the costs of their jobs, the potential effect upon profit, and various financial and budgetary alternatives.

When a job is vertically loaded it will inevitably increase in autonomy. And, as shown in Figure 4, this increase in objective personal control over the work will also lead to an increased feeling of personal responsibility for his work--and ultimately to higher internal work motivation.

5. Opening Feedback Channels. In virtually all jobs there are ways to open channels of feedback to individuals or teams to help them learn whether their performance is improving, deteriorating, or remaining at a constant level. While there are numerous "channels" through which information about performance can be provided, it generally is better for a worker to learn about his performance directly as he does his job--rather than from management on an occasional basis.

Job-provided feedback usually is more immediate and private than supervisor-supplied feedback, and increases the worker's feelings of personal control over his work in the bargain. Moreover, it avoids many of the potentially disruptive interpersonal problems which can develop when the only way a worker has to find out how he is doing is from direct messages or subtle cues from the boss.

Exactly what should be done to open channels for job-provided feedback will vary from job to job and organization to organization. Yet in many cases the changes involve simply removing existing blocks which isolate the individual from naturally-occuring data about performance--rather than generating entirely new feedback mechanisms. For example:

--Establishing direct client relationships (discussed above) often removes blocks between the worker and natural external sources of data about his work.

--Quality control efforts in many organizations often eliminate a natural source of feedback. The quality check on a product or service is done by people other than the individuals responsible for the work. Feedback to the workers--if there is any--is belated and diluted. It often fosters a tendency to think of quality as "someone else's concern." By placing quality control close to the worker (perhaps even in his own hands), the quantity and quality of data about performance that is available to him can dramatically increase.

--Tradition and established procedure in many organizations dictate that records about performance are kept by a supervisor and transmitted up (not down) in the organizational hierarchy. Sometimes supervisors even check the work and correct any errors themselves. The worker who made the error never knows it occurred--and is denied the very information which can enhance both his internal work motivation and the technical adequacy of his performance. In many cases, it is possible to provide standard summaries of performance records directly to the worker (as well as to his superior), there by giving him personally and regularly the data he needs to improve his performance.

--Computers and other automated operations sometimes can be used to provide the individual with data now blocked from him. Many clerical operations, for example, are now performed on computer consoles. These consoles often can be programmed to provide the clerk with immediate feedback in the form of a CRT display or a print-out indicating that an error has been made. Some systems even have been programmed to provide the operator with a positive feedback message when a period of error-free performance has been sustained.

Many organizations simply have not recognized the importance of feedback as a motivator. Data on quality and other aspects of performance are viewed as being of interest only to management. Worse, the standards for acceptable performance often are kept from workers as well. As a result, workers who would be interested in following the daily or weekly ups and downs of their performance, and in trying accordingly to improve, are deprived of the very guidelines they need to do so. They are like the golfer we mentioned earlier, whose efforts to correct his hook are stopped dead by fog over the driving range.

THE STRATEGY IN ACTION: HOW WELL DOES IT WORK?

So far we have examined a basic theory of how people get "turned on" to their work; a group of Core Dimensions of jobs which create the conditions for such internal work motivation to develop on the job; and a set of five Implementing Concepts which are the action steps recommended to boost a job on the Core Dimensions and thereby increase employee motivation, satisfaction, and productivity.

The remaining question is straightforward and important: Does it work? In reality, that question is two. First, does the theory itself hold water, or are we barking up the wrong conceptual tree? And secondly, does the change strategy really lead to measurable differences when it is applied in an actual oranizational setting?

This section summarizes the findings we have generated to date on these questions.

Is the Job Enrichment Theory Correct?

In general, the answer seems to be "yes." The JDS instrument has been taken by over one thousand employees working on about 100 diverse jobs in more than a dozen organizations over the last two years. These data have

been analyzed to test the basic motivational theory--and especially the impact of the Core Job Dimensions on worker motivation, satisfaction, and behavior on the job. An illustrative overview of some of the findings are given below.[9]

1. People who work on jobs high on the Core Dimensions are more motivated and satisfied than are people who work on jobs which score low on the dimensions. Employees with jobs high on the Core Dimensions (i.e., MPS scores greater than 240) were compared to those who held unmotivating jobs (MPS scores less than 40). As shown in Figure 5, employees with high MPS jobs were higher on (a) the three psychological states, (b) internal work motivation, (c) general satisfaction, and (d) "growth" satisfaction.

2. Figure 6 shows that the same is true for measures of actual behavior at work--absenteeism and performance effectiveness--although less strongly so for the performance measure.

3. Responses to jobs high in Motivating Potential are more positive for people who have strong growth needs than for people with weak needs for growth. In Figure 7, the linear relationship between the Motivating Potential of a job and employees' level of internal work motivation is shown, separately for people with high vs. low growth needs as measured by the JDS. While both groups of employees show increases in internal motivation as MPS increases, the rate of increase is significantly greater for the group of employees who have strong needs for growth.

How Does the Change Strategy Work in Practice?

The results summarized above suggest that both the theory and the diagnostic instrument "work" when used with real people in real organizations. In this section, we summarize a job enrichment project conducted at The Travelers Insurance Companies, which illustrates how the change procedures themselves work in practice.

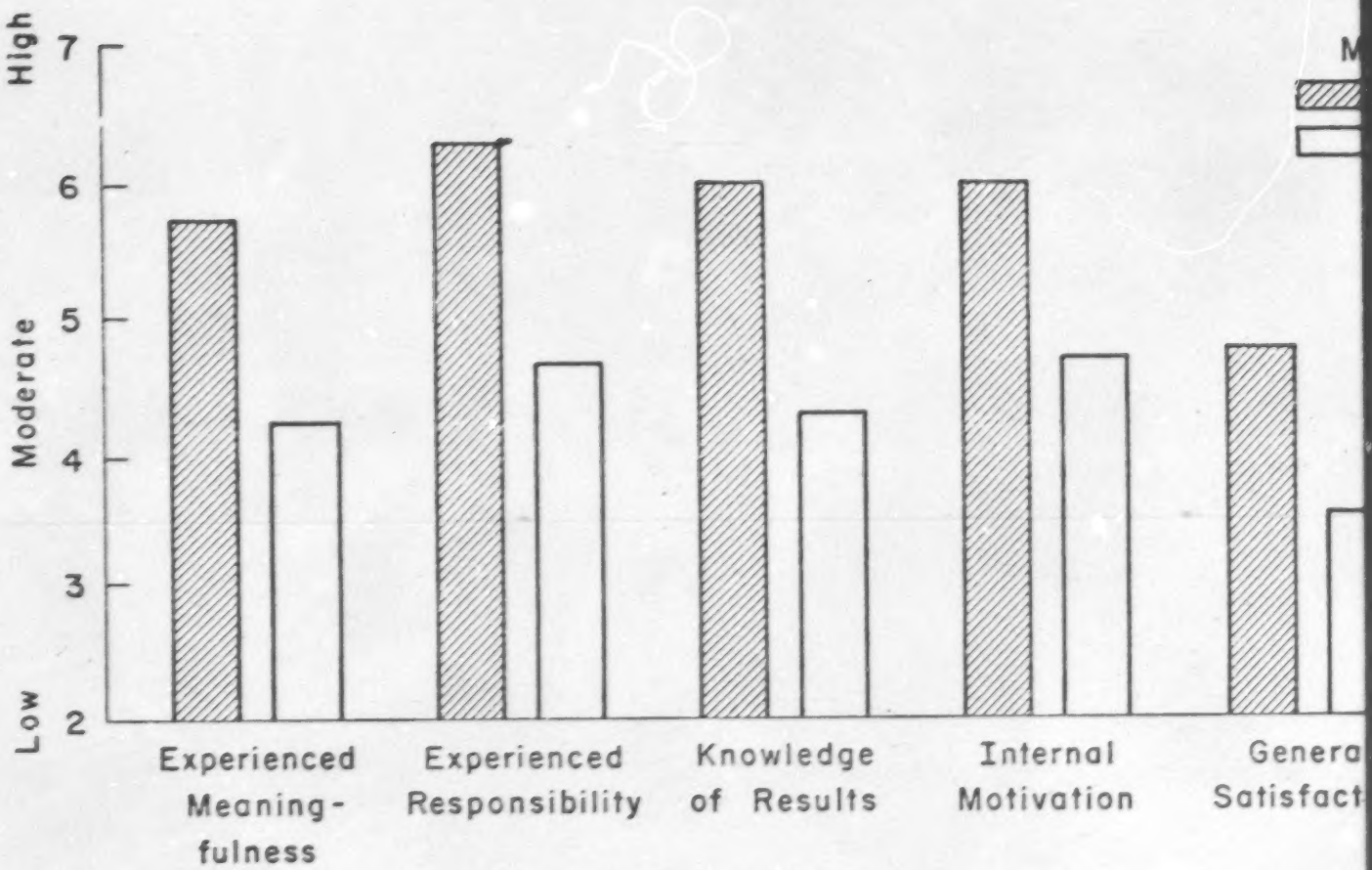

Figure 5

Reactions to Jobs High and Low in Motivating Potential for Employees in Two Banks and a Steel Company

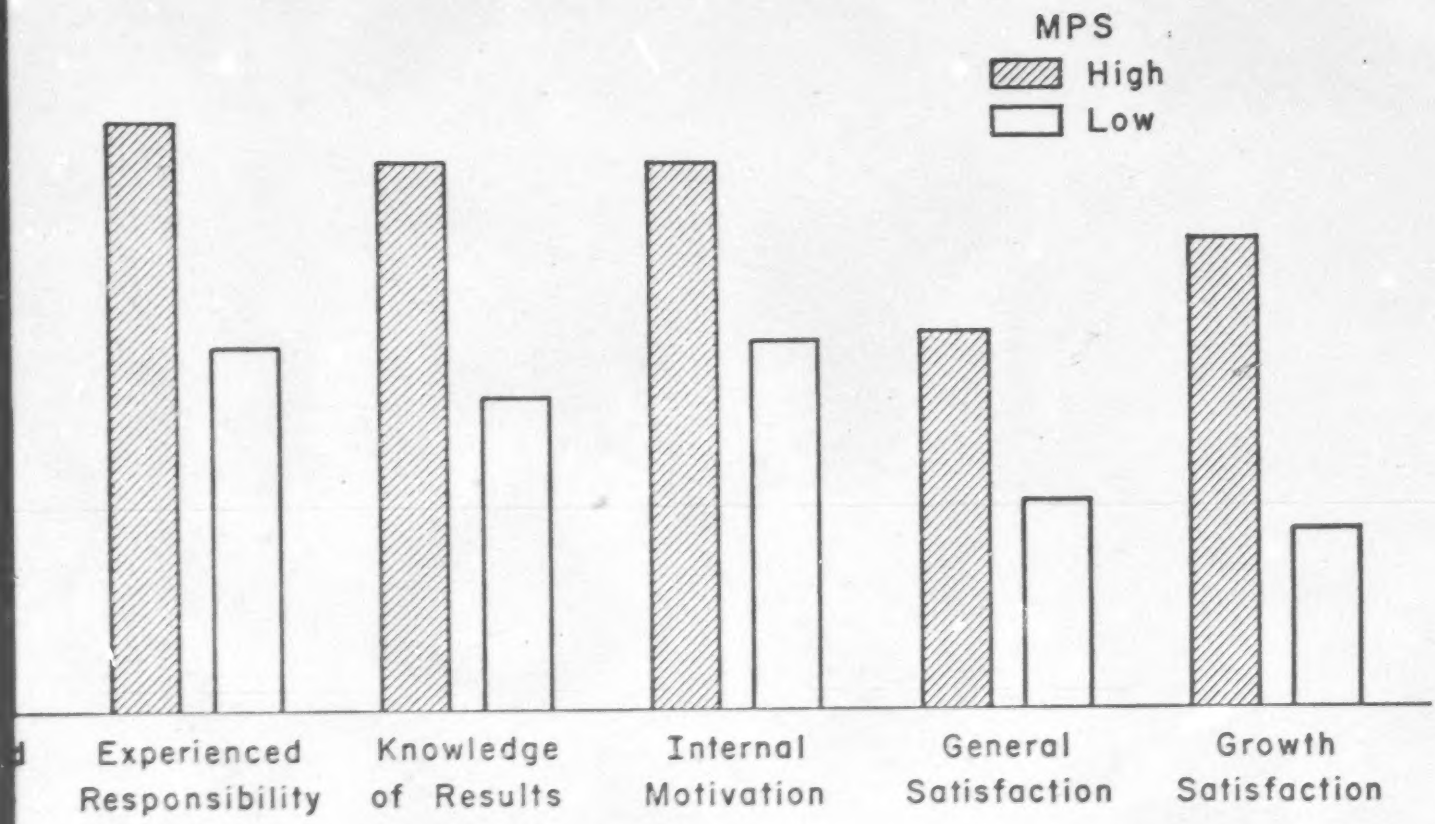

Figure 5

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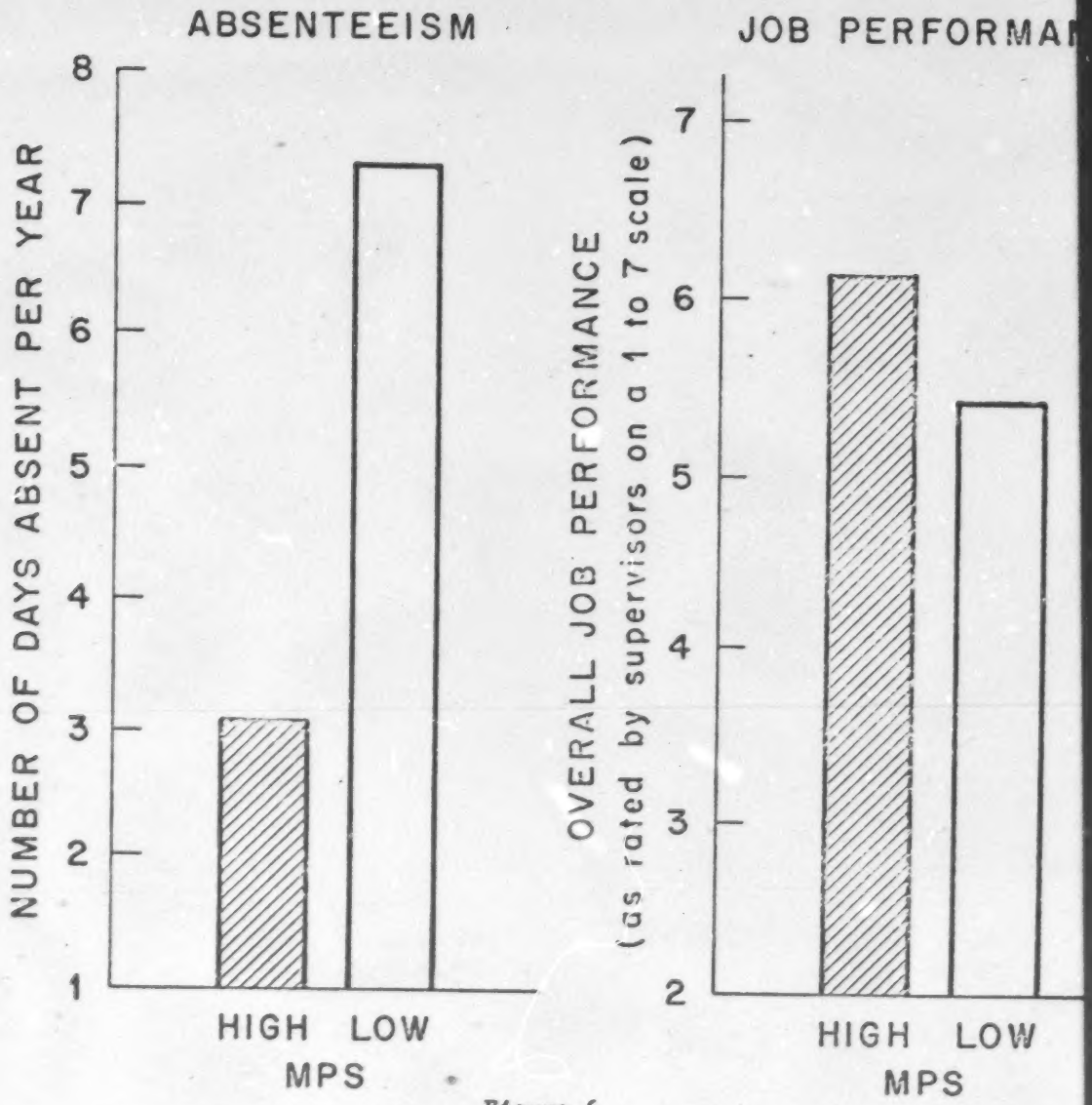

Figure 6
Absenteeism and Job Performance for Employees with Jobs High and Low in Motivating Potential

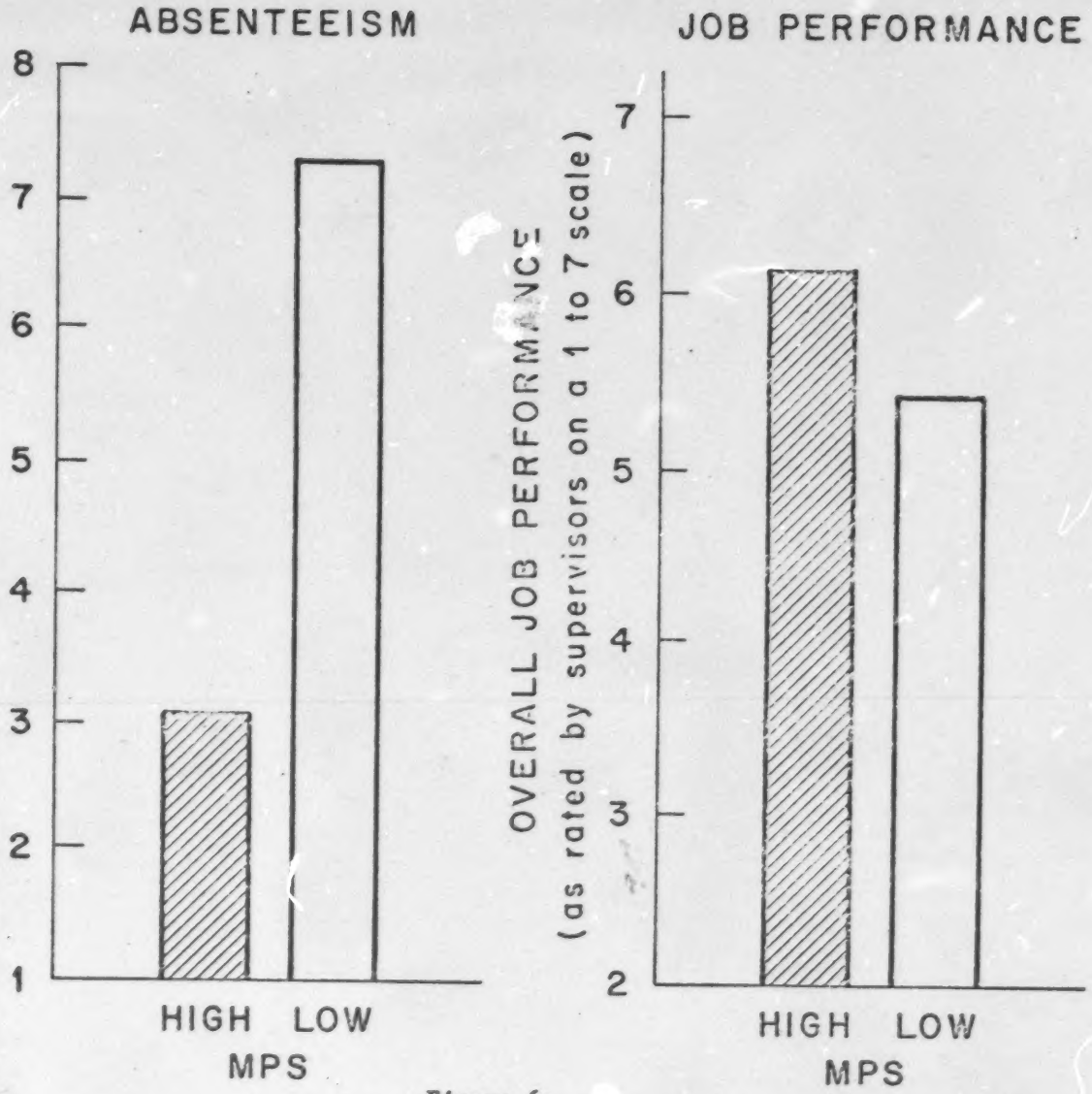

Figure 6
Absenteeism and Job Performance for Employees with Jobs High and Low in Motivating Potential

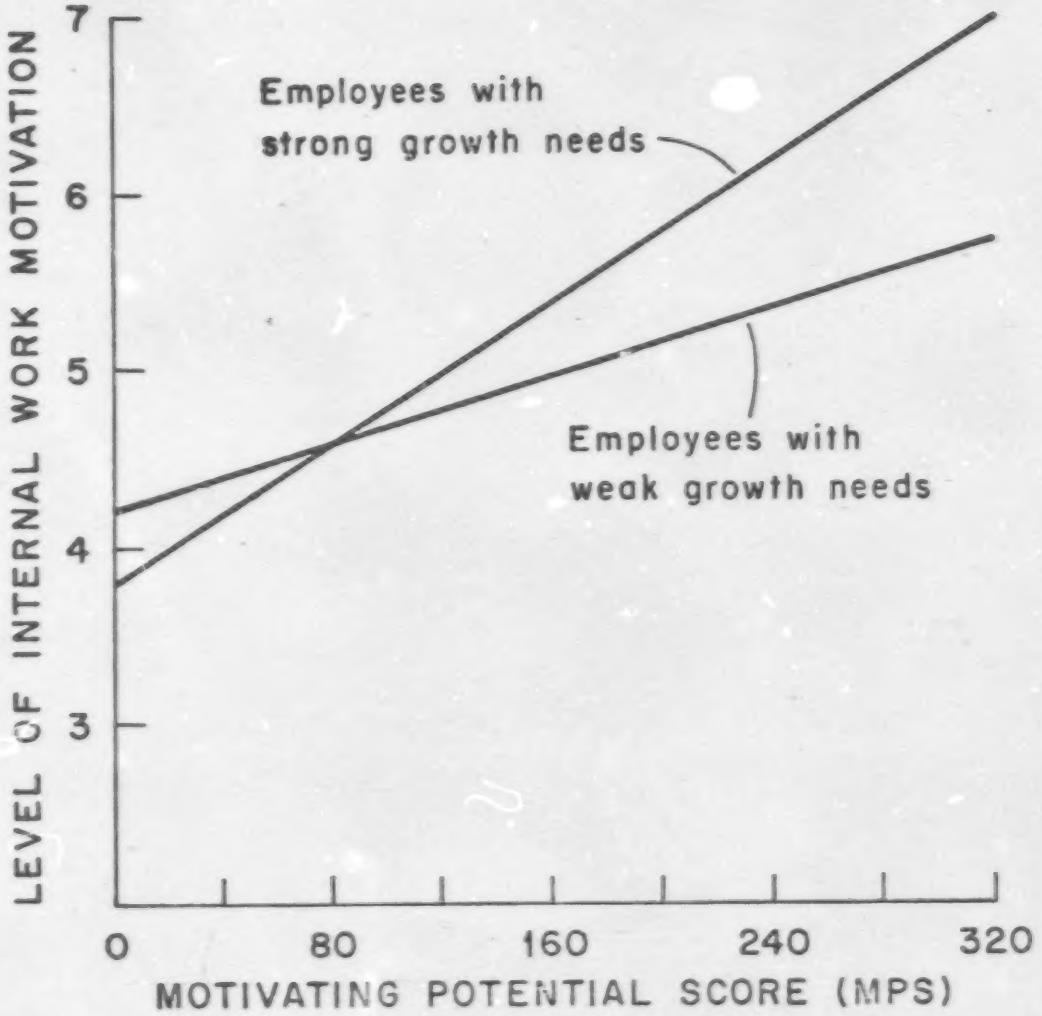

Figure 7

Relationship Between the Motivating Potential of a Job and the Internal Work Motivation of Employees
(Shown Separately for Employees with Strong vs. Weak Growth Need Strength)

The Traveler's project was designed with two purposes in mind. One was to achieve improvements in morale, productivity, and other indicators of employee well-being. The other was to test the general effectiveness of the strategy for job enrichment we have summarized in this paper.

The work group chosen was a keypunching operation. The group's function was to transfer information from printed or written documents onto punched cards for computer input. The workgroup consisted of 98 keypunch operators and verifiers (both in the same job classification), plus 7 assignment clerks. All reported to a supervisor, who, in turn, reported to the assistant manager and the manager of the data input division.

The size of individual punching orders varied considerably, from a few cards to as many as 2,500. Some work came to the work group with a specified delivery date, while other orders were to be given routine service on a predetermined schedule.

Assignment clerks received the jobs from the user departments. After reviewing the work for obvious errors, omissions, and legibility problems, the assignment clerk parceled out the work in batches expected to take about one hour. If the clerk found the work not suitable for punching it went to the supervisor, who either returned the work to the user department or cleared up problems by phone. When work went to operators for punching, it was with the instruction, "Punch only what you see. Don't correct errors, no matter how obvious they look."

Because of the high cost of computer time, keypunched work was 100% verified--a task that consumed nearly as many man-hours as the punching itself. Then the cards went to the supervisor, who screened the jobs for due dates before sending them to the computer. Errors detected in verification were assigned to various operators at random to be corrected.

The computer output from the cards was sent to the originating department, accompanied by a printout of errors. Eventually the printout went back to the supervisor for final correction.

A great many phenomena indicated that the problems being experienced in the work group might be due to poor motivation. As the only person performing supervisory functions of any kind, the supervisor spent most of his time responding to crisis situations, which recurred continually. He also had to deal almost daily with employee's salary grievances or other complaints. Employees frequently showed apathy or outright hostility toward their jobs.

Rates of work output, by accepted work measurement standards, was inadequate. Error rates were high. Due dates and schedules were frequently missed. Absenteeism was higher than average, especially before and after weekends and holidays.

The single, rather unusual exception was turnover. It was lower than the company-wide average for similar jobs. The company has attributed this fact to a poor job market in the base period just before the project began, and to an older, relatively more settled work force--made up, incidentally, entirely of women.

The Diagnosis. Using some of the tools and techniques we have outlined, a consulting team from the Management Services Department and from Roy W. Walters & Associates concluded that the keypunch operators' job exhibited the following serious weaknesses in terms of the Core Dimensions.

Skill Variety: There was none. Only a single skill was involved--the ability to punch adequately the data on the batch of documents.

Task Identity: Virtually nonexistent. Batches were assembled to provide an even workload, but not whole identifiable jobs.

Task Significance: Not apparent. The keypunching operation was a necessary step in providing service to the company's customers. The individual operator was isolated by an assignment clerk and a supervisor from any knowledge of what the operation meant to the using department--let alone its meaning to the ultimate customer.

Autonomy: None. The operators had no freedom to arrange their daily tasks to meet schedules, to resolve problems with the using department, or even to correct, in punching, information that was obviously wrong.

Feedback: None. Once a batch was out of the operator's hands, she had no assured chance of seeing evidence of its quality or inadequacy.

Design of the Experimental Trial. Since the diagnosis indicated that the Motivating Potential of the job was extremely low, it was decided to attempt to improve the motivation and productivity of the work group through job enrichment. Moreover, it was possible to design an experimental test of the effects of the changes to be introduced: the results of changes made in the target work group were to be compared with trends in a control work group of similar size and demographic make-up. Since the control group was located more than smile away, there appeared to be little risk of communication between members of the two groups.

A base period was defined before the start of the experimental trial period, and appropriate data were gathered on the productivity, absenteeism, and work attitudes of members of both groups. Data also were available on turnover; but since turnover was already below average in the target group, prospective changes in this measure were deemed insignificant.

An educational session was conducted with supervisors, at which they were given the theory and implementing concepts and actually helped to design the job changes themselves. Out of this session came an active plan consisting of about twenty-five change items that would significantly affect the design of the target jobs.

The Implementing Concepts and the Changes. Because the job as it existed was rather uniformly low on the Core Job Dimensions, all five of the Implementing Concepts were used in enriching it.

Natural Units of Work. The random batch assignment of work was replaced by assigning to each operator continuing responsibility for certain "accounts"--either particular departments or particular recurring jobs. Any work for those accounts now always goes to the same operator.

Task Combination. Some planning and controlling functions were combined with the central task of keypunching. In this case, however, these additions can be more suitably discussed under the remaining three Implementing Concepts.

Client Relationships. Each operator was given several channels of direct contact with clients. The operators, not their assignment clerks, now inspect their documents for correctness and legibility. When problems arise, the operator, not the supervisor, takes them up with the client.

Feedback. In addition to feedback from client contact, the operators were provided with a number of additional sources of data about their performance. The computer department now returns incorrect cards to the operators who punched them, and operators correct their own errors. Each operator also keeps her own file of Xerox copies of her errors. These can be reviewed to determine trends in error frequency and types of errors. Each operator receives weekly a computer printout of her errors and productivity--which is sent to her directly, rather than given to her by the supervisor.

Vertical Loading. Besides consulting directly with clients about work questions, operators now have the authority to correct obvious coding errors on their own. Operators may set their own schedules and plan their daily work, as long as they meet schedules. Some competent operators have been given the option of not verifying their work and making their own program changes.

Results of the Trial. The results were dramatic. The number of operators declined from 98 to 60. This occurred partly through attrition and partly through transfer to other departments. Some of the operators were promoted to higher-paying jobs in departments whose cards they had been handling--something that had never occurred before. Some details of the results are given below.

Quantity of Work: The control group, with no job changes made, showed an increase in productivity of 8.1% during the trial period. The experimental group showed an increase of 39.6%.

Error Rates: To assess work quality, error rates were recorded for about 40 operators in the experimental group. All were experienced, and all had been in their job before the job enrichment project began. For two months before the study, these operators had a collective error rate of 1.53%. For two months toward the end of the study, the collective error rate was 0.99%. By the end of the study the number of operators with poor performance had dropped from 11.1% to 5.5%.

Absenteeism: The experimental group registered a 24.1% decline in absences. The control group, by contrast, showed a 29% increase.

Attitudes Toward the Job: An attitude survey given at the start of the project showed that the two groups scored about average, and nearly identically, in nine different areas of work satisfaction. At the end of the project the survey was repeated. The control group showed an insignificant 0.5% improvement, while the experimental group's overall satisfaction score rose 16.5%.

Selective Elimination of Controls: Demonstrated improvements in operator proficiency permitted them to work with fewer controls. Travelers estimates that the reduction of controls had the same effect as adding seven operators--a saving even beyond the effects of improved productivity and lowered absenteeism.

Role of the Supervisor: One of the most significant findings in the Travelers experiment was the effect of the changes on the supervisor's job, and thus on the rest of the organization. The operators took on many responsibilities that had been reserved at least to the unit leaders and sometimes to the supervisor. The unit leaders, in turn, assumed some of the day-to-day supervisory functions that had plagued the supervisor. Instead of spending his days supervising the behavior of subordinates and dealing with crises, he was able to devote time to developing feedback systems, setting up work modules and spearheading the enrichment effort--in other words, managing.[10]

Summary. By applying work measurement standards to the changes wrought by job enrichment--attitude and quality, absenteeism, and selective administration of controls--Travelers was able to estimate the total dollar impact of the project. Actual savings in salaries and machine rental charges during the first year totaled $64,305. Potential savings by further application of the changes were put at $91,937 annually. Thus, by almost any measure used--from the work attitudes of individual employees to dollar savings for the company as a whole--The Travelers test of the job enrichment strategy proved a success.

CONCLUSION

What we have presented in this paper is a new strategy for the re-design of work in general, and for job enrichment in particular. The approach has four main distinguishing characteristics:

1. It is grounded in a basic psychological theory of what motivates people in their work.

2. The strategy specifies that planning for job changes should be done on the basis of data about the jobs and the people who do them--and a set of diagnostic instruments are provided to collect such data.

3. It provides a set of specific Implementing Concepts to guide actual job changes, as well as a set of theory-based rules for selecting which action steps are likely to be most beneficial in a given situation.

4. The strategy is buttressed by a set of findings showing that the theory holds water, that the diagnostic procedures are practical and informative, and that the Implementing Concepts can lead to changes which are beneficial both to organizations and to the people who work in them.

We believe that job enrichment is moving beyond the stage where it can be considered "yet another management fad." Instead, it represents a potentially powerful strategy for change which can help organizations achieve their goals for higher quality work--and at the same time further the equally legitimate needs of contemporary employees for a more meaningful work experience. Yet there are pressing questions about job enrichment and its use which remain to be answered.

Prominent among these is the question of employee participation in planning and implementing work redesign. The diagnostic tools and implementing concepts we have presented are neither designed nor intended for use only by management. Instead, our belief is that the effectiveness of job enrichment is likely to be enhanced when the tasks of diagnosing and changing jobs are undertaken collaboratively by management and by the employees whose work will be affected.

Moreover, the effects of work redesign on the broader organization remain generally uncharted. Evidence now is accumulating that when jobs are changed, turbulence can appear in the surrounding organization--for example, in supervisory-subordinate relationships, in pay and benefit plans, and so on. Such turbulence can be viewed by management either as a "problem" with job enrichment, or as an opportunity for further and broader organizational development by teams of managers and employees. To the

degree management takes the latter view, we believe, the oft-espoused goal of achieving basic organizational change through the redesign of work may come increasingly within reach.

The diagnostic tools and implementing concepts we have presented are useful in deciding on and designing basic changes in the jobs themselves. They do not address the broader issues of who plans the changes, how they are carried out, and how they are followed up. The way these broader questions are dealt with, we believe, may determine whether job enrichment will grow up--or whether it will die an early and unfortunate death, like so many other fledgling behavioral science approaches to organizational change.

Footnotes

1. The authors acknowledge with great appreciation the editorial assistance of John Hickey in the preparation of this paper, and the help of Kenneth Brousseau, Daniel Feldman and Linda Frank in collecting the data which are summarized here. The research activities reported were supported in part by the Organizational Effectiveness Research Program of the Office of Naval Research, and the Manpower Administration of the U.S. Department of Labor, both through contracts to Yale University.

2. See, for example, Herzberg *et al.*, 1959; Herzberg, 1966, 1968; Paul *et al.*, 1969; Ford, 1969.

3. See Turner & Lawrence, 1965; Hackman & Lawler, 1971; Hackman & Oldham, 1974b.

4. Useful feedback can come from other sources as well--for example, from co-workers, from an immediate supervisor, or from higher levels of management. In focusing on the motivational potential of *jobs* in this article, we are restricting our discussion to feedback that the individual gets directly from his job as he does it.

5. For the algebraically inclined, the Motivating Potential Score is computed as follows:

$$MPS = \left[\frac{\text{Skill Variety} + \text{Task Identity} + \text{Task Significance}}{3}\right] \times \left[\text{Autonomy}\right] \times \left[\text{Job Feedback}\right]$$

It should be noted that in some cases the MPS score can be *too* high for positive job satisfaction and effective performance--in effect over-stimulating the person who holds the job. This paper focuses on jobs which are toward the low end of the scale--and which potentially can be improved through job enrichment.

6. The diagnostic package is described in more detail by Hackman & Oldham, 1974a.

7. MPS scores can range from 1 to about 350. An "average" score would be about 125.

8. The nature of the Implementing Concepts and details about their use are described in more detail by Walters & Associates, in press.

9. Detailed results are reported by Hackman and Oldham, 1974a and 1974b.

10. It should be noted, however, that helping supervisors change their own work activities when their subordinates' jobs have been enriched is itself a challenging task. And if appropriate attention and help is not given to supervisors in such cases, they rapidly can become disaffected--and a job enrichment "backlash" can result (see, for example, Lawler, Hackman & Kaufman, 1973).

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